USER MANUAL
Data Management

(Document 27e)

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Table of Contents

1 MODULE OVERVIEW 1

1.1 INTRODUCTION 1
1.1.1 Objective 1
1.2 FUNCTION CHART 2
1.3 FLOW DIAGRAM 3
1.4 INTERACTIONS WITH OTHER MODULES 4
1.5 USER GROUP AND ACCESS RIGHT 7

2 OPERATION PROCEDURES 9

2.1 QUERY MAINTENANCE 9
Create query by wizard 9
Advance Query 15
2.2 SEARCH, DELETE AND MODIFY QUERY 23
Search and Delete Query 23
Modify Query 24
2.3 QUERY SHARING 26
2.4 TASK MAINTENANCE 28
Add Task 28
Modify Task 30
Delete Task 31
2.5 MAINTAIN TABLE ACCESS 33
2.6 EXECUTE QUERY / TASK 35
2.6.1 Execute Query 35
2.6.2 Execute Task 38
2.7 EXPORT QUERY / TASK 41
2.7.1 Export Query 41
2.7.2 Export Task 43
2.8 IMPORT 44
2.8.1 Import Task and Import Query 44
2.9 REPORT 46
2.9.1 Entity Relationship Diagram 46
2.9.2 Table structure 47
2.9.3 Data Manual 48
2.9.4 Query List 49
Query 49
Task 50
2.10 EXTRACT FOR TESS 51
Extract 51
Error Log 52
2.11 EXTRACT FOR SOP 53

3 APPENDIX 56

3.1 APPENDIX I: IMPORT / EXPORT XML FILE FORMAT 56
3.2 APPENDIX II: PARAMETER LIST 57

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1 Module Overview

1.1 Introduction

1.1.1 Objective

The Data Management module provides a mean for users to extract existing data from the WebSAMS system. For data security, the WebSAMS system allows WebSAMS administrator to assign different access rights to different users.

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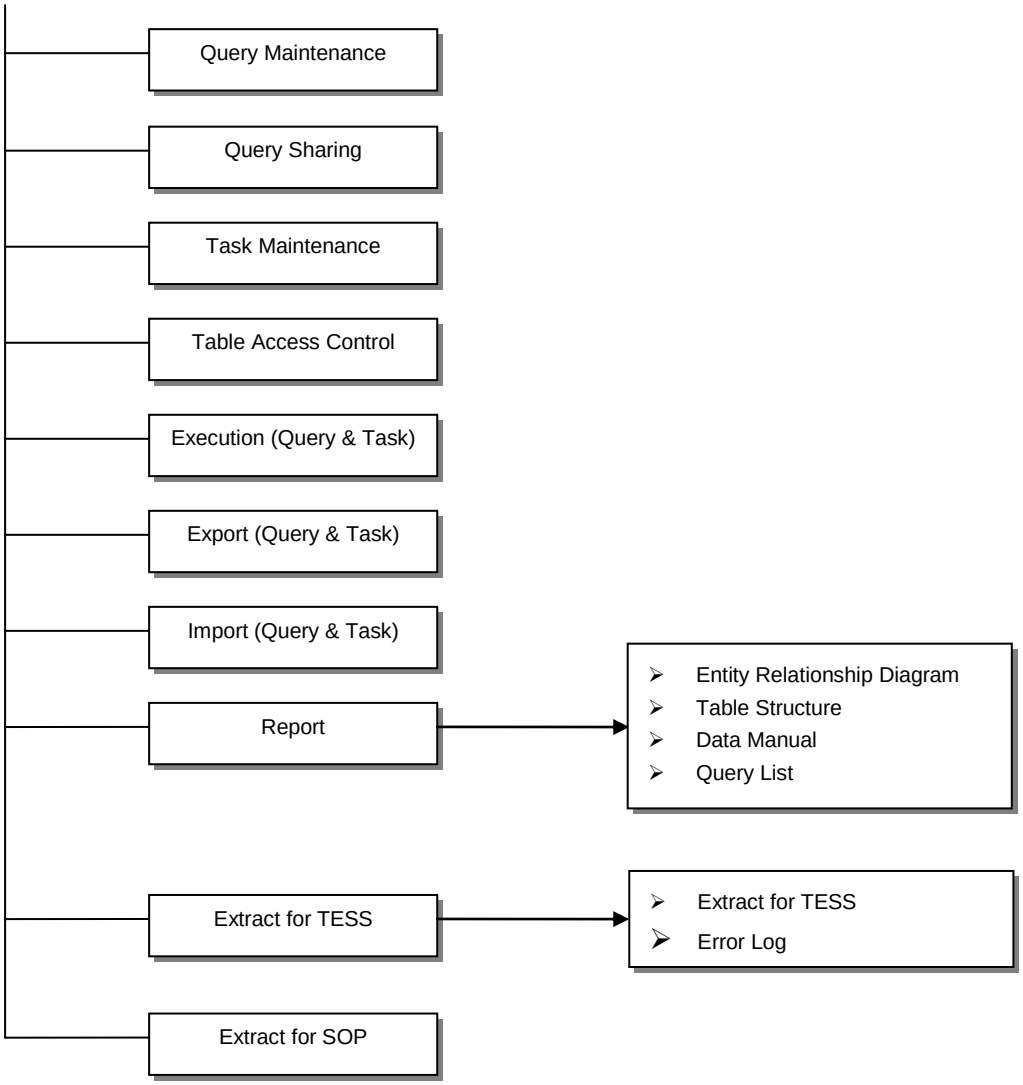
1.2 Function Chart

Data Management (DAT)



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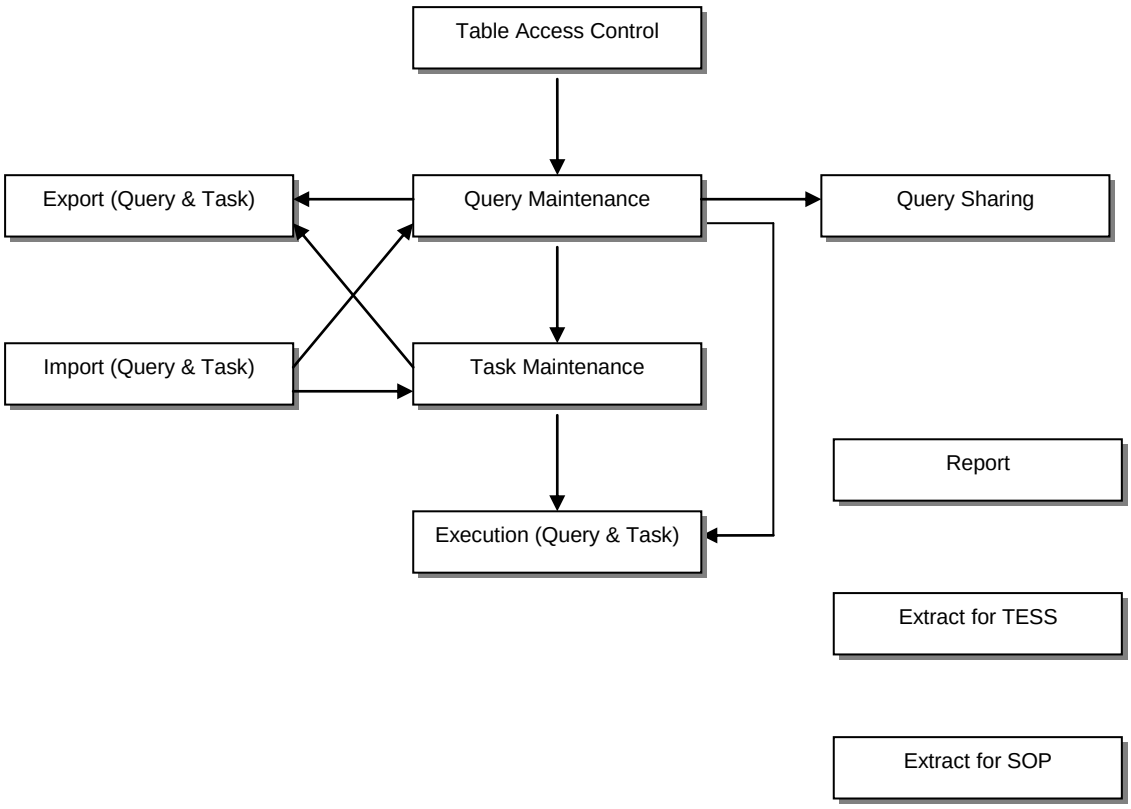
1.3 Flow Diagram



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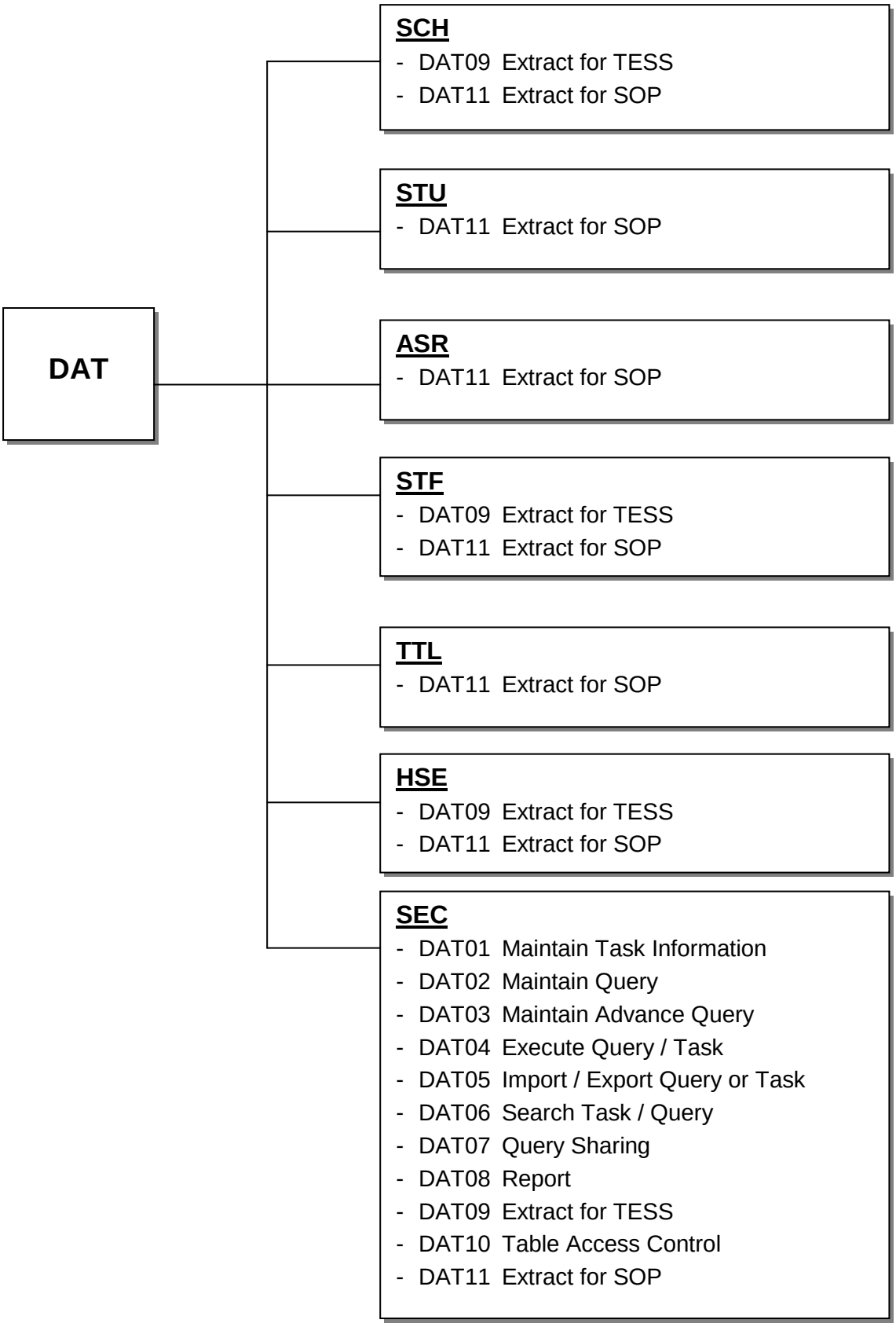
1.4 Interactions with other modules



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All DAT Functions

- Security (SEC)
  - Get access right from all user groups that the user belongs to

📖 **DAT02 – Maintain Query & DAT03 – Maintain Advance Query**

- Security (SEC)
  - Additional access right checking: Check whether the user belongs to the user groups SCHOOL_HEAD or SYSTEM_ADMIN, since only members of these 2 built-in groups can modify the queries owned by other users.

📖 **DAT04 – Execute Query / Task**

- Security (SEC)
  - Additional access right checking: Check the user's group memberships. (Only users of the built-in user groups SCHOOL_HEAD, STAFF_MANAGEMENT_1, STAFF_MANAGEMENT_2 and STAFF_MANAGEMENT_3 can execute query with the STF module tables. And only users of the built-in user groups SCHOOL_HEAD, FMP_ACCT_CLERK, FMP_PETTYCASH_CLERK, FMP_ADMIN, FMP_USER1, FMP_USER2 and FMP_USER3 can execute query with the FMP module tables.)

📖 **DAT09 – Extract Timetabling**

- School (SCH)
  - Retrieve the Current School Year
  - Retrieve School Basic Information (Week / Cycle Based, Session / Level, Number of School Day)
  - Retrieve School Facility with Capacity > 0 (Room)
  - Retrieve Class Basic Information (Class Teacher, Home Room, Floating Class)
  - Retrieve Compulsory Class Subject Information (Subject Teacher, Number of Period Per Cycle)
  - Retrieve Elective Class Subject Information (Subject Teacher, Number of Period Per Cycle)
  - Retrieve Cross Class Subject Group Information (Subject Teacher, Number of Period Per Cycle)
  - Retrieve Subject Group Subjects Information (Subject Teacher, Number of Period Per Cycle)
- Staff (STF)
  - Retrieve Current Staff with teaching duty
- Code Management (HSE)
  - Retrieve codes
- Security (SEC)
  - Get user's SUID

📖 **DAT11 – Extract for SOP**

- School (SCH)

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- Retrieve the available School Year, School Level, School Session and Class Level

- Student (STU)
  - Retrieve active Student Particulars
- Assessment (ASR)
  - Retrieve academic result of the students.
- Staff (STF)
  - Retrieve Current Staff with teaching duty
- Timetabling (TTL)
  - Retrieve the final result set of the selected data set
- Code Management (HSE)
  - Retrieve codes

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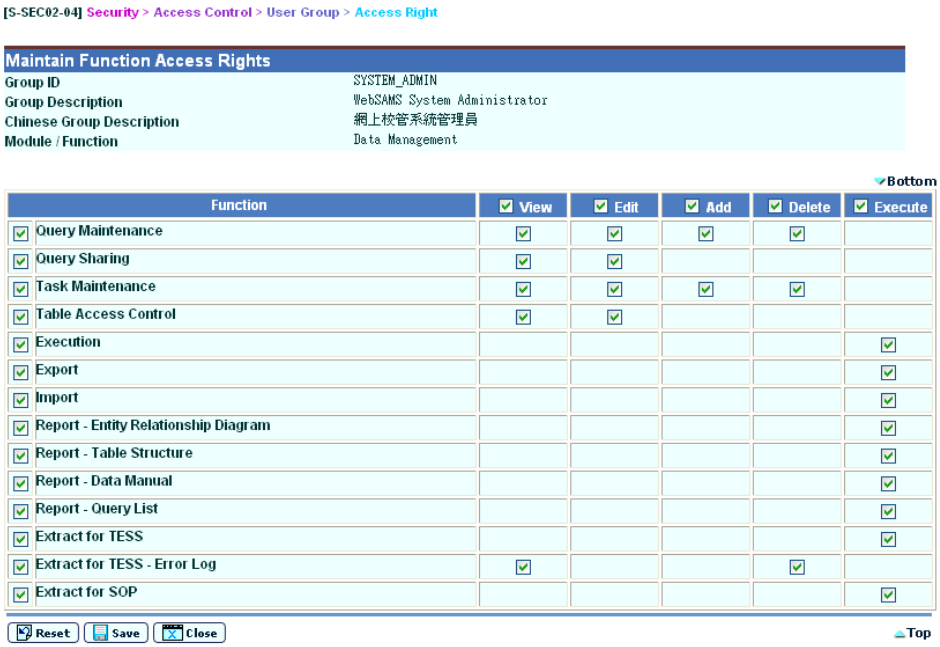
1.5 User Group and Access Right

Users have to possess certain access rights to use the corresponding functions in Data Management module. Users assigned to different user groups will have different access rights. Among the built-in user groups, only SYSTEM_ADMIN, SCHOOL_HEAD, DM_ADMIN, DM_USER and TIMETABLING_ADMIN can use functions of Data Management module. The pre-assigned access rights of these five built-in groups are depicted below.



[S-SEC02-04] Security > Access Control > User Group > Access Right

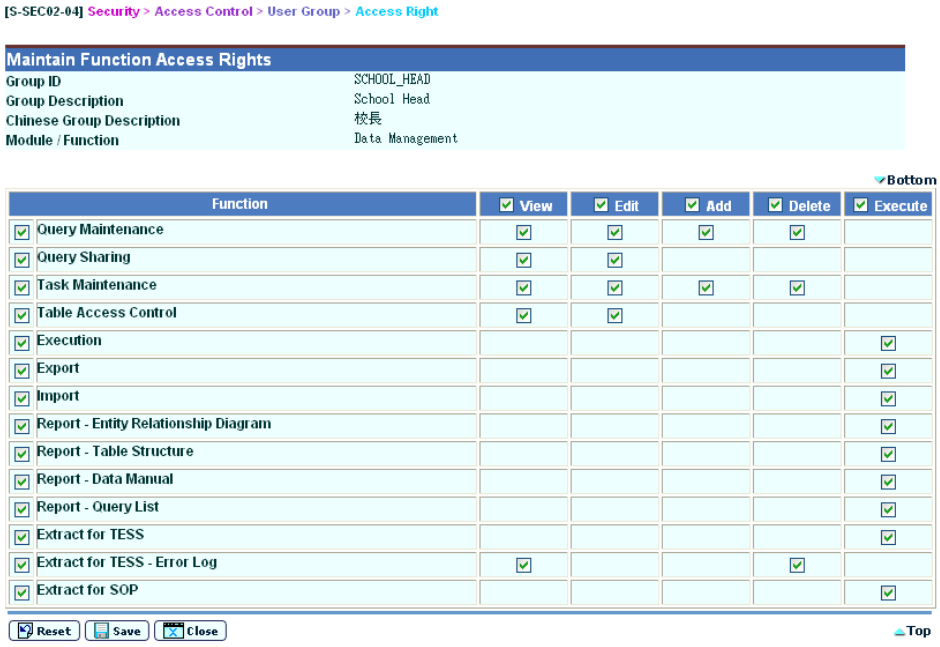
Maintain Function Access Rights

Group ID	SYSTEM_ADMIN
Group Description	WebSAMS System Administrator
Chinese Group Description	網上校管系統管理員
Module / Function	Data Management

Bottom

Function	View	Edit	Add	Delete	Execute
Query Maintenance	☑	☑	☑	☑	
Query Sharing	☑	☑			
Task Maintenance	☑	☑	☑	☑	
Table Access Control	☑	☑			
Execution					☑
Export					☑
Import					☑
Report - Entity Relationship Diagram					☑
Report - Table Structure					☑
Report - Data Manual					☑
Report - Query List					☑
Extract for TESS					☑
Extract for TESS - Error Log	☑			☑	
Extract for SOP					☑

Reset Save Close Top



[S-SEC02-04] Security > Access Control > User Group > Access Right

Maintain Function Access Rights

Group ID	SCHOOL_HEAD
Group Description	School Head
Chinese Group Description	校長
Module / Function	Data Management

Bottom

Function	View	Edit	Add	Delete	Execute
Query Maintenance	☑	☑	☑	☑	
Query Sharing	☑	☑			
Task Maintenance	☑	☑	☑	☑	
Table Access Control	☑	☑			
Execution					☑
Export					☑
Import					☑
Report - Entity Relationship Diagram					☑
Report - Table Structure					☑
Report - Data Manual					☑
Report - Query List					☑
Extract for TESS					☑
Extract for TESS - Error Log	☑			☑	
Extract for SOP					☑

Reset Save Close Top

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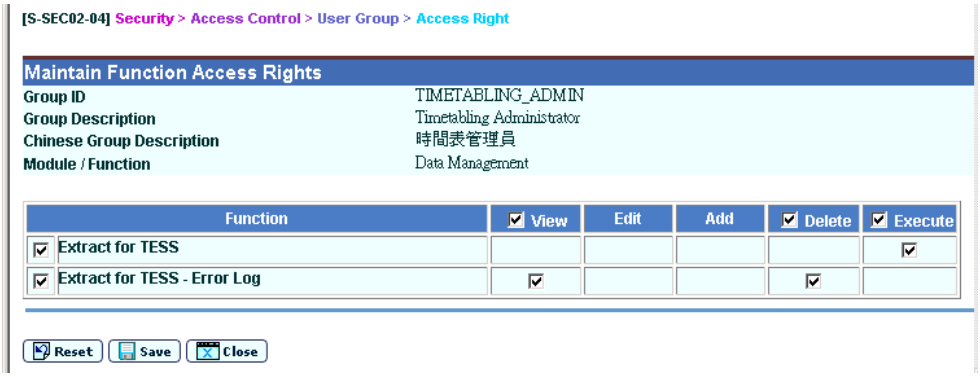
[S-SEC02-04] Security > Access Control > User Group > Access Right
Maintain Function Access Rights
Group ID DM_USER
Group Description Data Management User
Chinese Group Description 資料管理用戶
Module / Function Data Management
Function View Edit Add Delete Execute
Query Maintenance
Task Maintenance
Execution
Reset Save Close


[S-SEC02-04] Security > Access Control > User Group > Access Right
Maintain Function Access Rights
Group ID TIMETABLING_ADMIN
Group Description Timetabling Administrator
Chinese Group Description 時間表管理員
Module / Function Data Management
Function View Edit Add Delete Execute
Extract for TESS
Extract for TESS - Error Log
Reset Save Close

Alternatively, user-defined groups can also be created with access rights of Data Management module.

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2 Operation Procedures

2.1 Query Maintenance

Create query by wizard

📖 Function Description

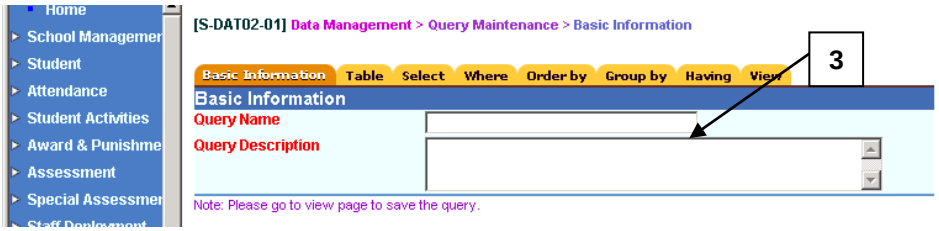
Users can create queries by wizard and execute them by this function.

📖 Pre-requisites

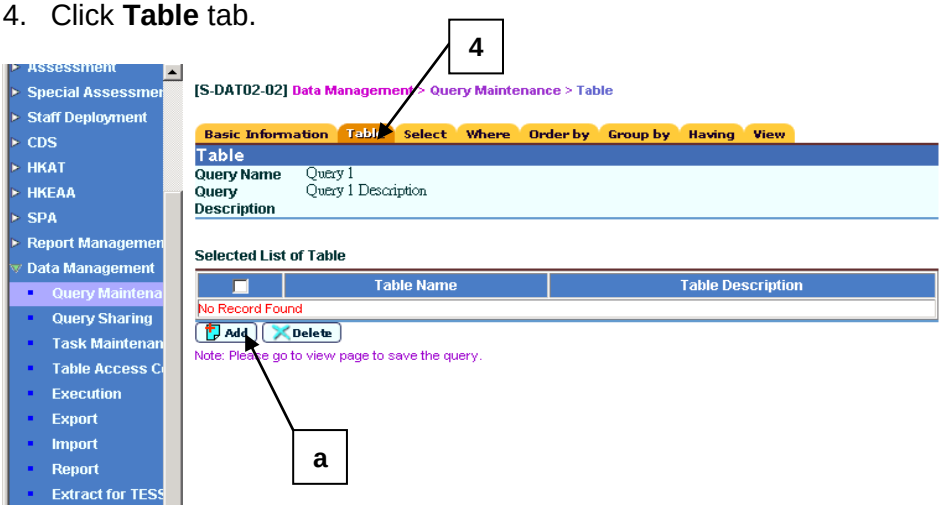
Users have to possess Query Maintenance Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Query Maintenance]** on the left menu.
2. Click the **[Add Wizard]** button.
3. Enter Query Name and Query Description in the Basic Information page.



4. Click **Table** tab.



   a. Click the **[Add]** button.
   b. A new window will pop up. Enter the search criteria and click the **[Search]** button. The tables that the users have access rights will be shown.

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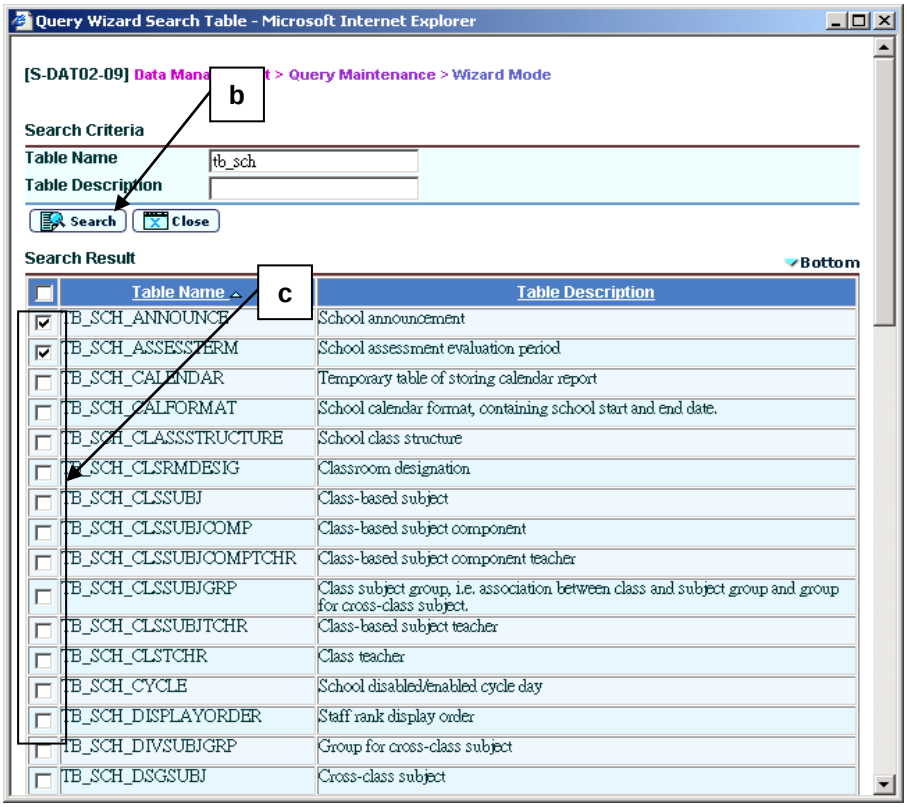
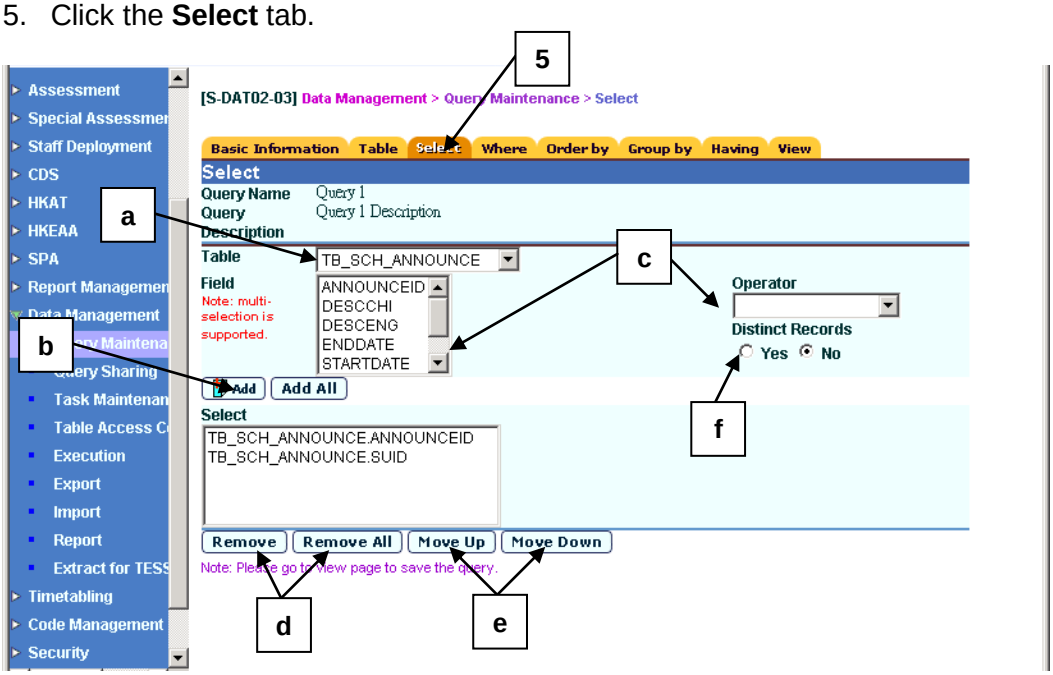


c. Check the box beside the **Table Name**.

d. Click the **[Add]** button to add the table(s) to the query.

5. Click the **Select** tab.



a. Select one table from the **Table** drop down list. The fields of the selected table will be shown in the **Field** list box below.

b. To include fields in the query result, select one or more table fields in the **Field** list box. Click the **[Add]** to add the selected fields.

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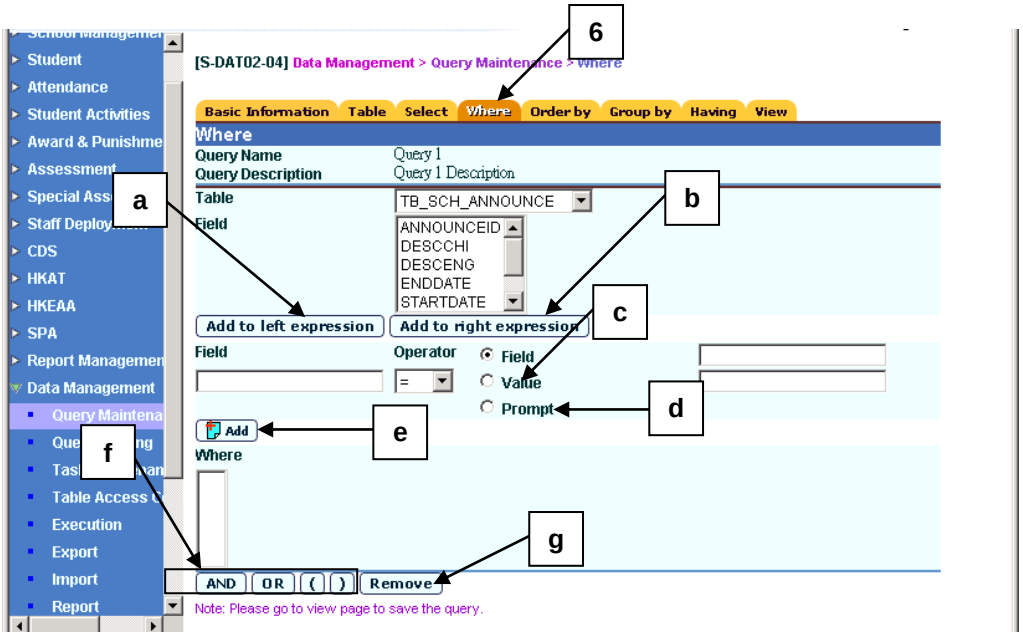
c. Alternatively, to include aggregate functions (e.g. COUNT, MAX) in the query result, users have to apply the operator to the fields. They can select an operator from the **Operator** drop down list and also one or more table fields, and then click the **[Add]**. Operator will then be applied to the selected field(s).

d. Users can select any of the selected fields in the **Field** list box and click the **[Remove]** button to remove the field(s). They can also click the **[Remove All]** button to remove all the fields in the **Field** list box.

e. Users can select one of the selected fields in the **Field** list box and click the **[Move Up]** or **[Move Down]** button to change the sequence of the selected field.

f. For the query result to return distinct records, users have to mark the **Distinct Records** radio button value to "Yes".

6. Click the **Where** tab (optional).



a. Select **Table** and **Field**. Click the **[Add to left expression]** to add the selected **Field** as the left part of the expression.

b. Click the **[Add to right expression]** to add the selected **Field** as the right part of the expression.

c. If the **Value** radio box is selected as the right expression, users can enter some specific values in the right expression.

d. If the **Prompt** radio box is selected as the right expression, a **?** will be added to the right expression automatically. Users will have to manually enter the value when the query is executed.

e. Click the **[Add]** button to add the **where** statement.

f. Users can click the **[AND]**, **[OR]**, **[( ]** or **[ )]** button to add the operator in the statement.

g. Users can click the **[Remove]** button to remove the **Where** statement(s).

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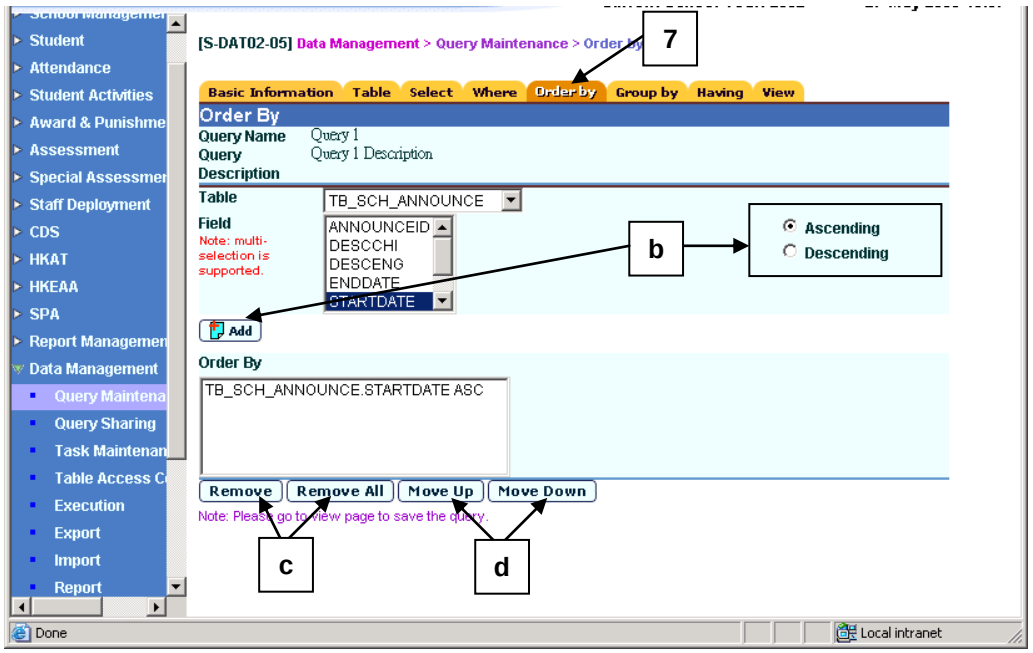
7. Click the **Order By** tab (optional).



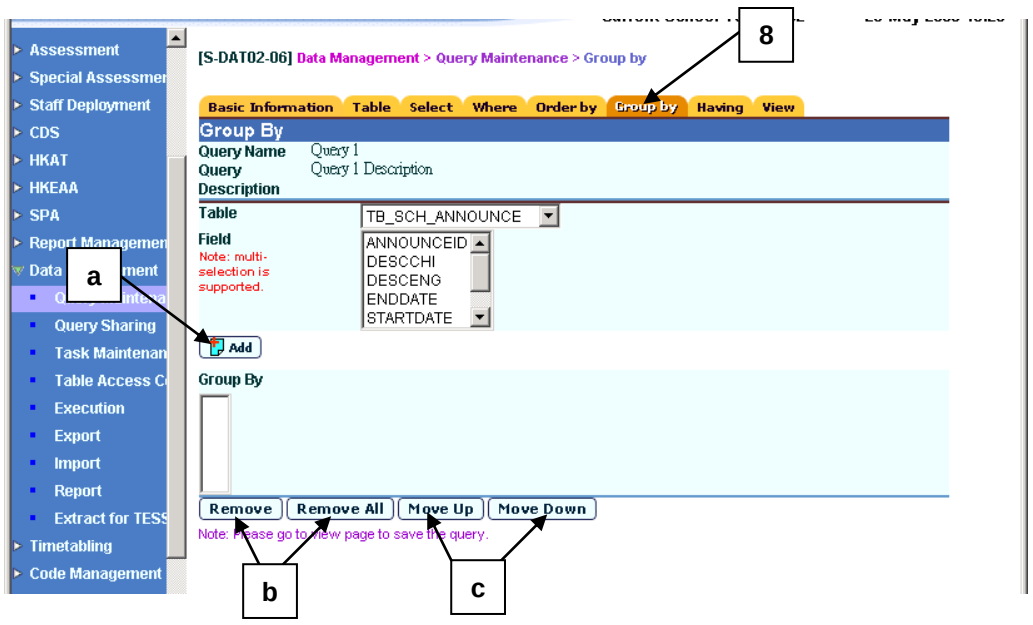
a. Select **Table** and **Field**.

b. Select the order as **Ascending** or **Descending** order. Click the **[Add]** to add the **Order By** statement(s).

c. Users can select any of the selected fields in the **Order By** list box and click the **[Remove]** button to remove the field(s). Users can also click the **[Remove All]** button to remove all the fields in the **Order By** list box.

d. Users can select one of the selected fields in the **Order By** list box and click the **[Move Up]** or **[Move Down**] butoon to change the sequence of the selected field.

8. Click the **Group by** tab. (optional).



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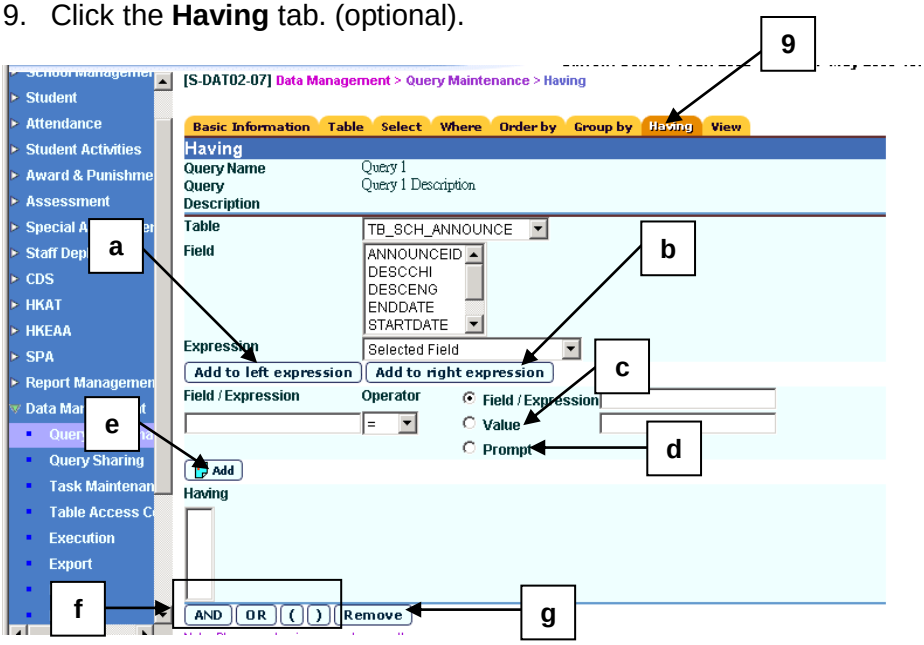
a. Select **Table** and **Field**. Click the **[Add]** to add the **Group By** statement(s). If the list is not empty, then all non-operator fields in the selected list must be included. For example, "select suid, schid, max (schyear) from tb_sch_school group by suid" is not supported, while "select suid, schid, max (schyear) from tb_sch_school group by suid, schid" is supported.

b. Users can select any of the selected fields in the **Group By** list box and click the **[Remove]** button to remove the field(s). Users can also click the **[Remove All]** button to remove all the fields in the **Group By** list box.

c. Users can select one of the selected fields in the **Group By** list box and click the **[Move Up]** or **[Move Down]** button to change the sequence of the selected field.

9. Click the **Having** tab. (optional).



a. Select **Table**, **Field** and **Expression**. Click **[Add to left expression]** to add the selected **Field** as the left part of the expression.

b. Click the **[Add to right expression]** to add the selected **Field** as the right part of the expression.

c. If the **Value** radio box is selected as the right expression, users can enter some specific values in the right expression.

d. If the **Prompt** radio box is selected as the right expression, a **?** will be added to the right expression automatically. Users will have to enter the value when the query is executed.

e. Click the **[Add]** button to add the **Having** statement(s).

f. Users can click the **[AND]**, **[OR]**, **[( ]** or **[ )]** button to add the operator in the statement.

g. Users can click the **[Remove]** button to remove the **Having** statement(s).

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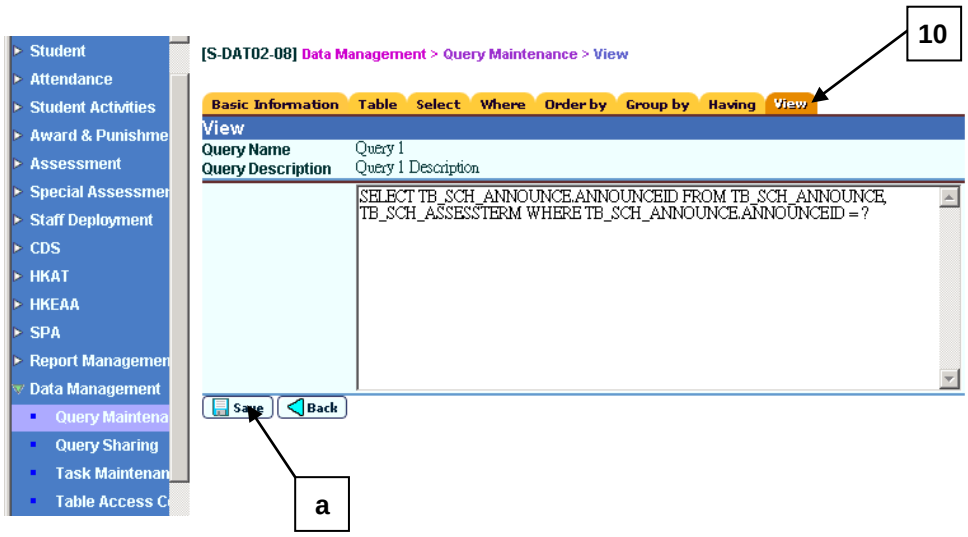
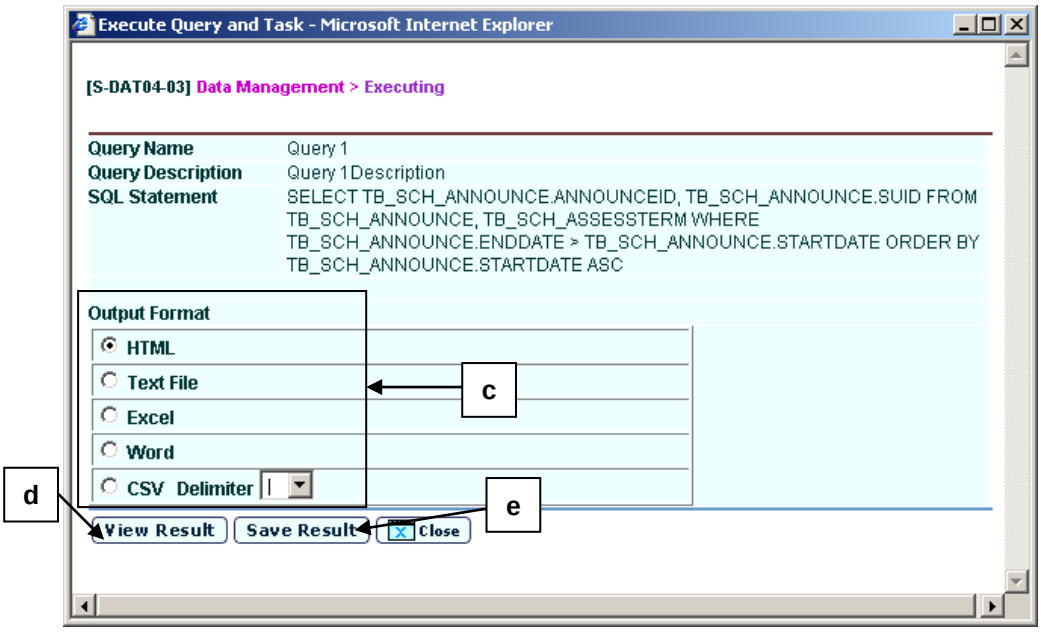
10. Click the **View** tab.



a. The query statement will be displayed. Click the **[Save]** button to save the query.
b. After saving the query successfully, users can click the **[Go To Execute]** button to execute the query.
c. A new window will pop up. Select the **Output Format**.
d. Click the **[View Result]** button to view the execution result in a new window.
e. Click the **[Save Result]** button to save the execution result.



Post-effects

N/A.

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Notes

1. Only the owner of the query can delete the query.
2. Only users of the SYSTEM_ADMIN and SCHOOL_HEAD user groups and the owner of the query can modify the query.
3. If a query is modified, the owner of the query will be changed to the user who makes the modification.
4. The name of the user-created queries cannot start with "~", since the "~" character designates built-in standard queries.
5. Query names cannot duplicate.
6. If the query is saved with the restricted tables that the user cannot access, an error message will be shown.
7. When a query is being saved, the system will check the syntax correctness and whether the syntax is supported by WebSAMS. If the syntax is incorrect or not supported, an error message will be shown.

Advance Query

Function Description

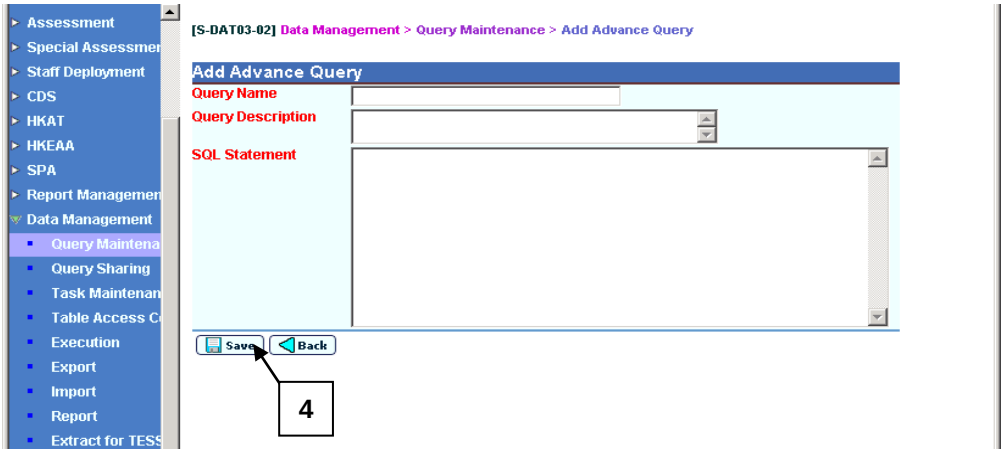
Users can create advance queries and execute them in this function.

Pre-requisites

Users have to possess Query Maintenance Function access right.

User Procedures

1. Click **[Data Management]** → **[Query Maintenance]** on the left menu.
2. Click the **[Add Advance]** button.



3. Enter **Query Name**, **Query Description** and **SQL Statement**.
4. Click the **[Save]** button.

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📖 Post-effects

N/A

📖 Notes

1. Only the owner of the query can delete the query.
2. Only users of the SYSTEM_ADMIN and SCHOOL_HEAD user groups and the owner of the query can modify the query.
3. If a query is modified, the owner of the query will be changed to the user who makes the modification.
4. The name of the user-created queries cannot start with "~", since the "~" character designates the built-in standard queries.
5. Query names cannot duplicate.
6. If the query is saved with the restricted tables that the user cannot access, an error message will be shown.
7. When a query is being saved, the system will check the syntax correctness and whether the syntax is supported by WebSAMS. If the syntax is incorrect or not supported, an error message will be shown.
8. The length of a query cannot exceed 8,000 characters.

Basic Syntax

SELECT select-list
FROM table-expression
[ON search-condition]
[WHERE search-condition]
[GROUP BY column-name]
[HAVING search-condition]
[ORDER BY { expression | integer }]

The clauses in the SELECT statement are as follows:

- The SELECT clause specifies the columns users want to retrieve.
- The FROM clause specifies the tables from which columns are pulled. It is required in all queries that retrieve data from tables.
- The ON clause specifies how tables in the FROM clause are to be joined. It is used only for multi-table queries and is not discussed here.
- The WHERE clause specifies the rows in the tables users want to see.
- The GROUP BY clause allows users to collect aggregate data.
- The HAVING clause specifies rows which aggregate data is to be collected.
- By default, rows are returned from relational databases in an order that has no meaning. Users can use the ORDER BY clause to sort the rows in the result set.

Most of the clauses are optional, but if they are included then they must appear in the correct order.

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select list

{ column-name | expression } [[AS] alias-name], ...| *

The select list is a list of expressions, separated by commas, specifying what will be retrieved from the database. An asterisk (*) means to select all columns of all tables in the FROM clause.

Aggregate functions are allowed in the select list (see SQL Functions). Subqueries are also allowed in the select list. Each subquery must be within parentheses.

Alias-names can be used throughout the query to represent the aliased expression. If the optional alias name is not specified after an expression, the expression itself will be shown in the query result.

WHERE clause

This clause specifies which rows will be selected from the tables named in the FROM clause. It is also used to do joins between multiple tables. This is accomplished by putting a condition in the WHERE clause that relates a column or group of columns from one table with a column or group of columns from another table. Both tables must be listed in the FROM clause.

For the WHERE clause, user can specify a field equals to a prompt [?], e.g. SELECT tableA.name FROM tableA WHERE tableA.id = ?

If a SQL statement is saved with prompt, user will be required to enter the specific value when executing the SQL statement.

GROUP BY clause

Uses can group by columns, alias names, or functions. The result of the query contains one row for each distinct set of values in the named columns, aliases, or functions. All NULL-containing rows are treated as a single set. The resulting rows are often referred to as groups since there is one row in the result for each group of rows from the table list. Aggregate functions can then be applied to these groups to get meaningful results.

When GROUP BY is used, the select-list, HAVING clause, and ORDER BY clause must not reference any identifier that is not named in the GROUP BY clause. The exception is that the select-list and HAVING clause may contain aggregate functions.

HAVING clause

This clause selects rows based on the group values and not on the individual row values. The HAVING clause can only be used if either the statement has a GROUP BY clause or the select list consists solely of aggregate functions. Any column names referenced in the HAVING clause must either be in the GROUP BY clause or be used as a parameter to an aggregate function in the HAVING clause.

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ORDER BY clause

This clause sorts the results of a query. Each item in the ORDER BY list can be labeled as ASC for ascending order (the default) or DESC for descending order. If the expression is an integer n , then the query results will be sorted by the n 'th item in the select list.

UNION

The results of several SELECT statements can be combined into a larger result using UNION. The component SELECT statements must each have the same number of items in the select list, and cannot contain an ORDER BY clause.

SELECT statement

UNION { ALL }

SELECT statement

[ORDER BY { expression | integer }]

The results of UNION ALL are the combined results of the component SELECT statements. The results of UNION are the same as UNION ALL, except that duplicate rows are eliminated. Eliminating duplicates requires extra processing, so UNION ALL should be used instead of UNION where possible.

If ORDER BY is used, only integers are allowed in the order by list. These integers specify the position of the columns to be sorted. The column names displayed are the same column names that are displayed for the first SELECT statement.

SQL Functions

ABS (numeric-expression)	Returns the absolute value of a numeric expression.
ACOS (numeric-expression)	Returns the arc-cosine, in radians, of a numeric expression.
ASCII (string-expression)	Returns the integer ASCII value of the first byte in a string-expression.
ASIN (numeric-expression)	Returns the arc-sine, in radians, of a number.
ATAN (numeric-expression)	Returns the arc-tangent, in radians, of a number.
ATAN2 (numeric-expression1, numeric-expression2)	Returns the arc-tangent, in radians, of the ratio of two numbers.
AVG (expression)	The mean of the supplied expression over the returned rows.
CEILING (numeric-expression)	Returns the ceiling (smallest integer not less than) of a number.
CHAR (integer-expression)	Returns the character with the ASCII value of a number.
CONVERT (data type, expression [, format-style])	Returns an expression converted to a supplied data type.
COS numeric-expression)	Returns the cosine of a number.
COT (numeric-expression)	Returns the cotangent of a number.
COUNT (expression)	The number of rows in the supplied group

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	where the expression is not NULL.
COUNT (*)	The number of rows in each group.
DATE (expression)	Converts the expression into a date, and removes any hours, minutes or seconds.
DATEFORMAT (datetime-expression, string-expression)	Returns a string representing a date-expression in the specified format.
DAY (date-expression)	Returns a number from 1 to 31 corresponding to the day of the month of the given date.
DAYNAME (date-expression)	Returns the name of the day of the week from a date.
DEGREES (numeric-expression)	Converts a number from radian to degree.
DIFFERENCE (string-expression-1, string-expression-2)	Returns the difference in the SOUNDEX values between the two string expressions.
EXP (numeric-expression)	Returns the exponential function, e to the power of a number.
FLOOR (numeric-expression)	Returns the floor of (largest integer not greater than) a number.
GREATER (expression1, expression2)	Returns the greater of two parameter values.
HOUR (datetime-expression)	Returns a number from 0 to 23 corresponding to the hour component of a datetime.
IDENTITY (expression)	Generates integer values, starting at 1, for each successive row in a query.
IFNULL (expression-1, expression-2 [, expression-3])	If the first expression is the NULL value, then the value of the second expression is returned. If the first expression is not NULL, the value of the third expression is returned. If the first expression is not NULL and there is no third expression, NULL is returned.
ISNULL (expression, expression [, ...])	Returns the first non-NULL expression in the parameter list.
LCASE (string-expression)	Converts all characters in a string to lower case.
LEFT (string-expression, integer-expression)	Returns a number of characters from the beginning of a string.
LENGTH (string-expression)	Returns the number of characters in the specified string.
LESSER (expression1, expression2)	Returns the lesser of two parameter values.
LOCATE (string-expression-1, string-expression-2 [, integer-expression])	Returns the position of one string within another.
LOG (numeric-expression)	Returns the natural logarithm of a number.
LOG10 (numeric-expression)	Returns the base 10 logarithm of a number.
LOWER (expression)	Converts all characters in a string to lower case.

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LTRIM (string- expression)	Trims leading blanks from a string.
MAX (expression)	The maximum value of the expression, over the returned rows.
MIN (expression)	The minimum value of the expression, over the returned rows.
MINUTE (datetime-expression)	Returns a number from 0 to 59 corresponding to the minute component of a datetime value.
MOD (dividend, divisor)	Returns the remainder when one whole number is divided by another.
MONTH (date-expression)	Returns a number from 1 to 12 corresponding to the month of the given date.
MONTHNAME (date-expression)	Returns the name of the month from a date.
NOW (*)	Returns the current date and time. This is the historical syntax for CURRENT TIMESTAMP.
NULLIF (expression-1, expression-2)	To provide an abbreviated CASE expression by comparing expressions.
NUMBER (*)	Generates numbers starting at 1 for each successive row in the results of the query. NUMBER is primarily intended for use in select lists.
PI (*)	Returns the numeric value PI.
POWER (numeric-expression-1, numeric-expression-2)	Calculates one number raised to the power of another.
QUARTER (date-expression)	Returns a number indicating the quarter of the year from the supplied date expression.
RADIANS (numeric-expression)	Converts a number from degree to radian.
RAND ([integer-expression])	Returns a random number in the interval 0 to 1, with an optional seed.
REPEAT (string-expression, integer-expression)	Concatenates a string a specified number of times.
REPLACE (original-string, search-string, replace-string)	Replaces all occurrences of a substring with another substring.
RIGHT (string-expression, integer-expression)	Returns the rightmost characters of a string.
ROUND (numeric-expression, integer-expression)	Rounds the numeric-expression to the specified integer-expression amount of places after the decimal point.
RTRIM (string- expression)	Trims trailing blanks from a string.
SECOND (datetime-expression)	Returns a number from 0 to 59 corresponding to the second component of the given datetime value.
SIGN (numeric-expression)	Returns the sign of a number.
SIN (numeric-expression)	Returns the sine of a number.
SOUNDEX (string-expression)	Returns a number representing the sound of a string.
SPACE (integer-expression)	Returns a specified number of spaces.

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SQRT (numeric-expression)	Returns the square root of a number.
SUM (expression)	The sum of the expression, over the returned rows.
STRING (string-expression [, ...])	Concatenates one or more strings into one large string.
SUBSTRING (string-expression, start [, length])	Returns a substring of a string.
TAN (numeric-expression)	Returns the tangent of a number.
TRIM (string- expression)	Removes leading and trailing blanks from a string.
"TRUNCATE" (numeric-expression, integer-expression)	Truncates a number at a specified number of places after the decimal point.
UCASE (string-expression)	Converts all characters in a string to upper case.
UPPER (expression)	Converts all characters in a string to upper case.
YEAR (date-expression)	Returns a number corresponding to the year of the given date.

Users can use the optional keyword DISTINCT with AVG, SUM, LIST, and COUNT to eliminate duplicate values before the aggregate function is applied.

The expression to which the syntax statement refers is usually a column name. It can also be a more general expression.

Join types

There are several types of join conditions. The most common condition, the equal join, is based on equality. The following query lists each order number and the name of the customer who places the order.

```
SELECT tableA.id, tableB.name
FROM tableA JOIN tableB ON tableA.id = tableB.id
```

The condition for joining the values in two columns does not need to be equality (=). Users can use any of the other comparison operators: not equal (<>), greater than (>), less than (<), greater than or equal to (>=), and less than or equal to (<=).

Inner joins and outer joins differ in their treatment of rows that have no match in the other table: rows appear in an inner join only if both tables contain at least one row that satisfies the join condition.

By contrast, an outer join contains rows whether or not a row exists in the opposite table to satisfy the join condition. Use the keywords LEFT or RIGHT to identify the table that is to appear in its entirety.

- A LEFT OUTER JOIN contains every row in the left-hand table.

```
SELECT tableA.id, tableB.name
FROM tableA LEFT OUTER JOIN tableB ON tableA.id = tableB.id
```

- A RIGHT OUTER JOIN contains every row in the right-hand table.

```
SELECT tableA.id, tableB.name
```

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FROM tableA RIGHT OUTER JOIN tableB ON tableA.id = tableB.id

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2.2 Search, Delete and Modify Query

Search and Delete Query

📖 Function Description

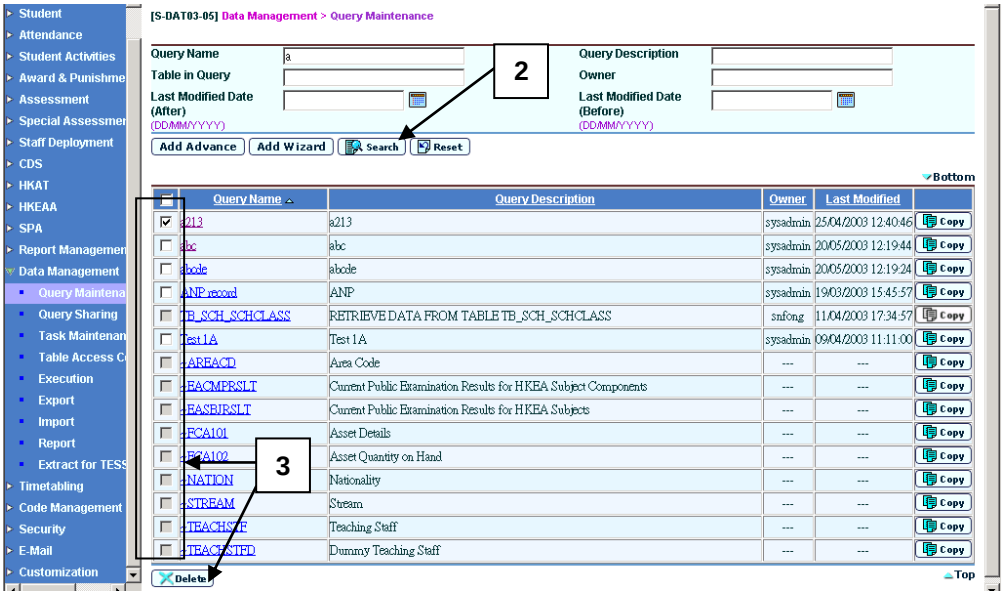
Users can search and delete queries by this function.

📖 Pre-requisites

Users have to posses Query Maintenance Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Query Maintenance]** on the left menu.
2. Fill in the search criteria. Click the **[Search]** button to search for queries.



3. Users can check the box beside the **Query Name** and click the **[Delete]** button to delete queries. Only the owner of the query can delete the query.

📖 Post-effects

N/A

📖 Notes

Built-in standard queries cannot be deleted. The checkboxes of the standard queries are disabled.

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Modify Query

Function Description

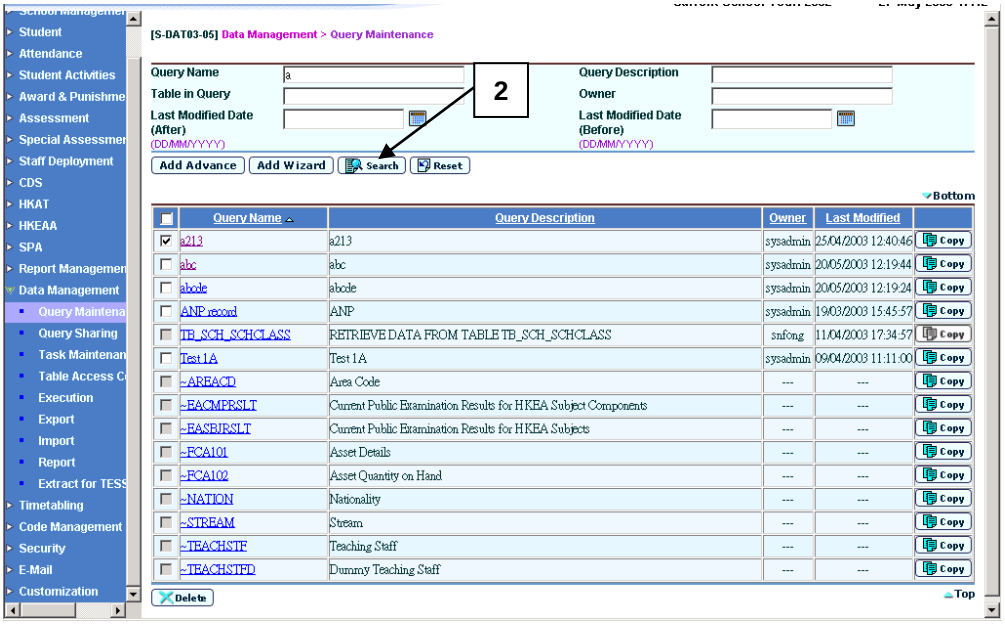
Users can modify the query information.

Pre-requisites

Users have to possess Query Maintenance Function access right.

User Procedures

1. Click **[Data Management]** → **[Query Maintenance]** on the left menu.
2. Fill in the search criteria. Click the **[Search]** button to search for queries.



3. Click the **Query Name** from the search results to view the query.
4. Users can modify the query in the same way that they create a query by wizard or through advanced query and click the **[Save]** to save the query.
5. Users can click the **[Go To Execute]** button to execute the query.
   a. A new window will pop up. Select the **Output Format**.
   b. Click the **[View Result]** button to view the execution result in a new window.
   c. Click the **[Save Result]** button to save the execution result.

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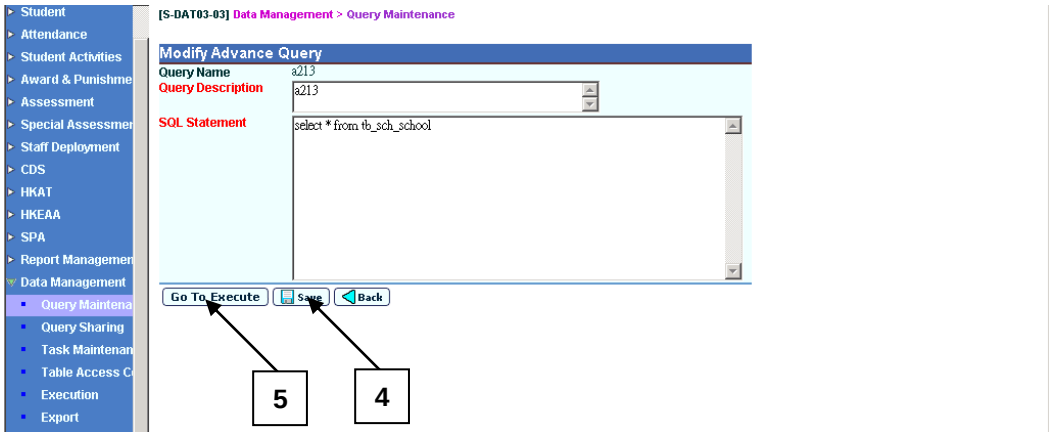

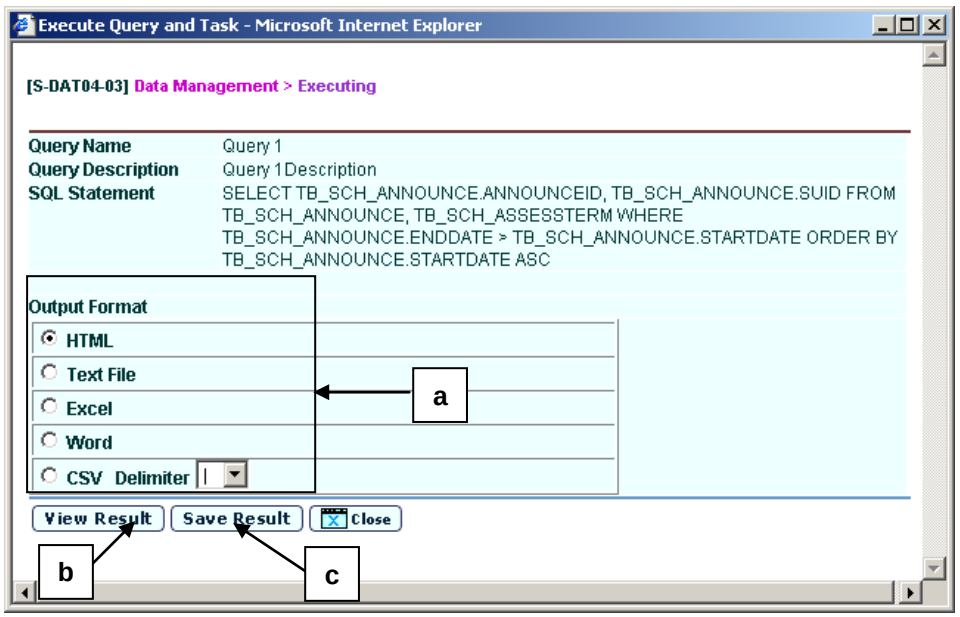

📖 Post-effects

N/A

📖 Notes

N/A

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2.3 Query Sharing

Function Description

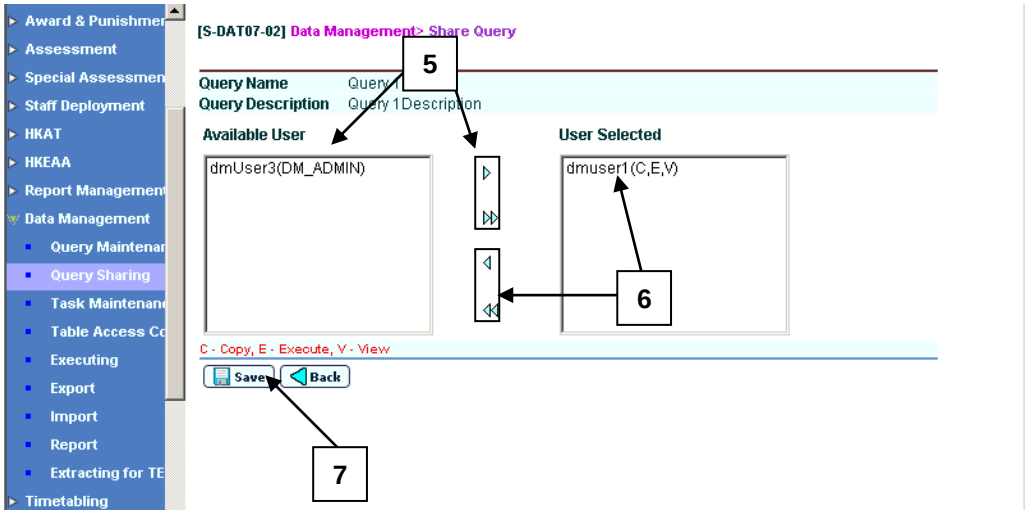
The query owners should use this facility to share the access right of their queries.

Pre-requisites

1. Queries should be prepared.
2. Users have to possess Query Sharing Function access right.

User Procedures

1. Click **[Data Management]** → **[Query Sharing]** on the left menu.
2. Fill in the search criteria. Click the **[Search]** button to search for a particular query. Only the queries owned by the user will be listed.
3. Click on the **Query Name** from the search results to view the query.
4. The existing users that can be assigned the rights to copy, execute or view the shared query will be shown.



5. To add users to the shared user list, select the users from the list of **Available User** and adds to the list of **User Selected**.
6. To remove users from the shared user list, select the users from the list of **User Selected** and put them back to the list of **Available User**.
7. Click the **[Save]** button.

Post-effects

N/A

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🕮 Notes

1. There are three user groups with the access rights of Data Management:
   - SYSTEM_ADMIN: Users who have the access right to add / delete / update / copy the SQL queries in the Data Management module.
   - DM_ADMIN: Users who have the access rights to add / delete / update / copy the SQL queries in the Data Management module.
   - DM_USER: Users who can execute the queries (if given the access right to execute the query).
2. There are three types of access right for each query:
   - Share Access: If the owner of the query shares the query to a DM_ADMIN user, the user will have the Share Access Right. In other words, that user can copy and execute the query.
   - Execute Access: If the owner of the query shares the query to a DM_USER user, the user will have Execute Access to the query. In other words, that user can execute the query to extract data.
   - View Access: All users will have the View access right. These users can view the following:
     - Query name
     - Query description
     - Query owner
     - Last modified

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2.4 Task Maintenance

Add Task

Function Description

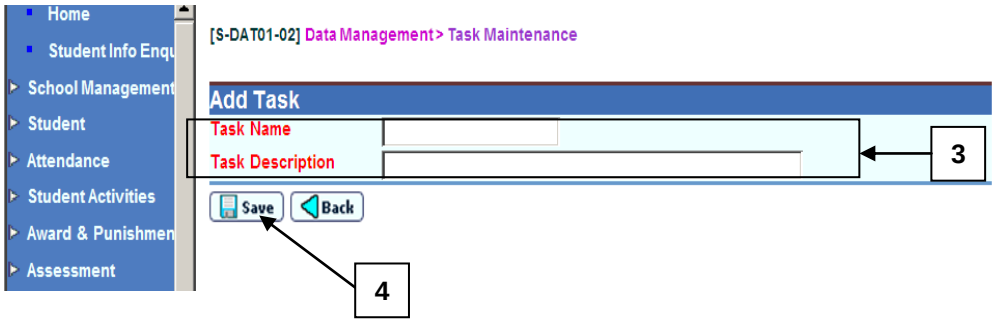
For convenience, several queries can be combined together to form a task. This function is used to add a new task and assign queries to the task.

Pre-requisites

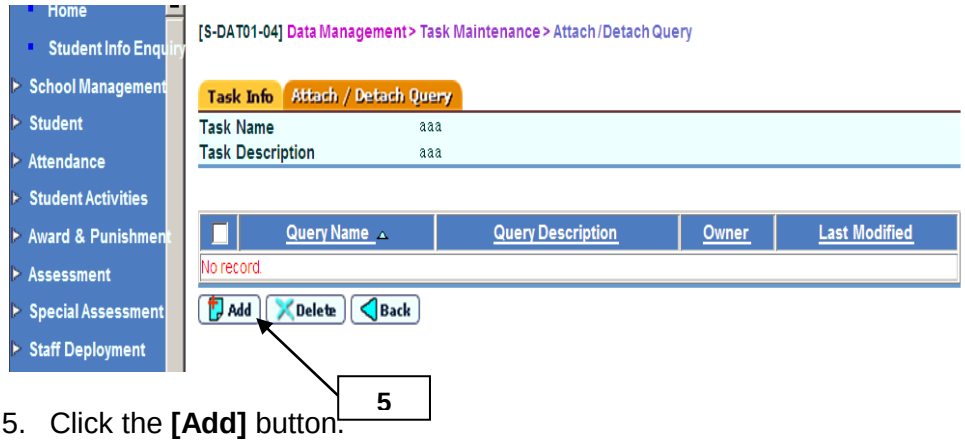
1. Queries should be prepared.
2. Users have to possess Query Sharing Function access right.

User Procedures

1. Click **[Data Management]** → **[Task Maintenance]** on the left menu.
2. Click the **[Add]** button.



3. Enter a new **Task Name** and **Task Description**.
4. Click the **[Save]** button.



5. Click the **[Add]** button.
6. A new window will pop up. Fill in the search criteria. Click the **[Search]** button to search for queries.

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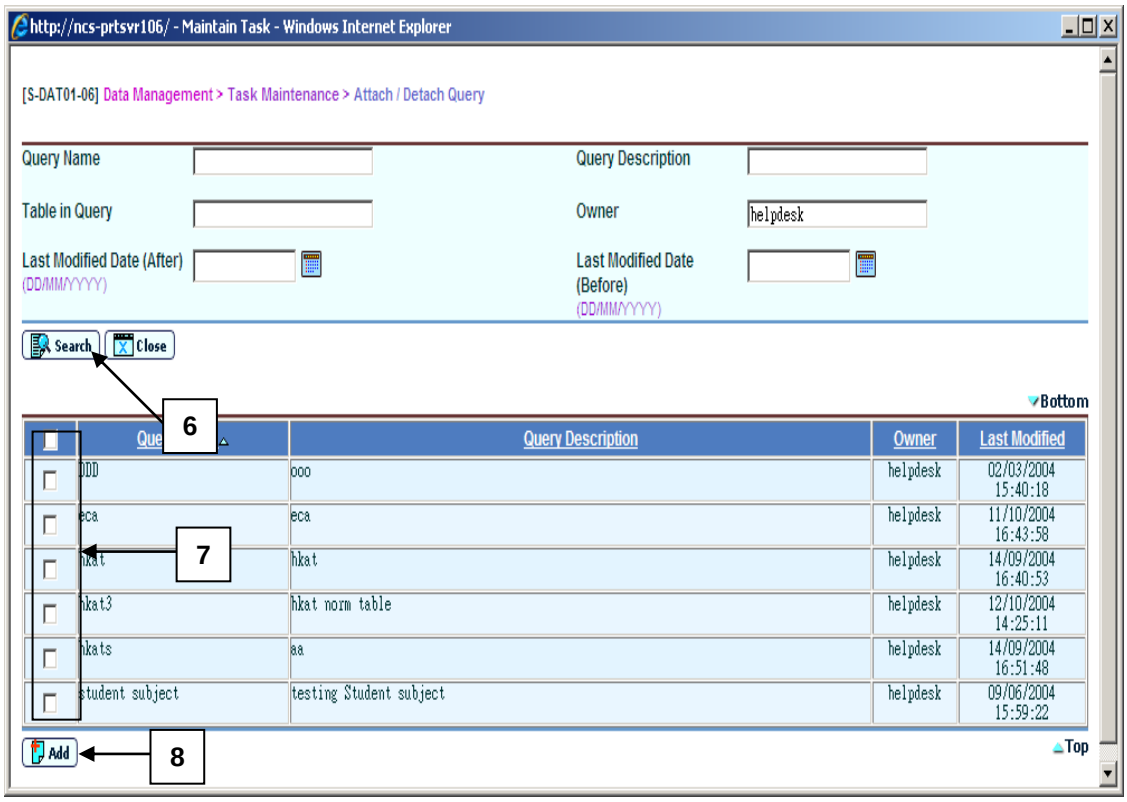

7. Check the box beside the **Query Name** to be added.
8. Click the **[Add]** button.

📖 Post-effects

N/A

📖 Notes

1. The same query can be attached to one or more tasks.
2. A task can have zero or more than one query attached to it. A query can be attached to zero or more than one task.
3. The new task name cannot start with "~~", since the "~~" characters designate the built-in standard tasks.
4. Task names cannot duplicate.

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Modify Task

Function Description

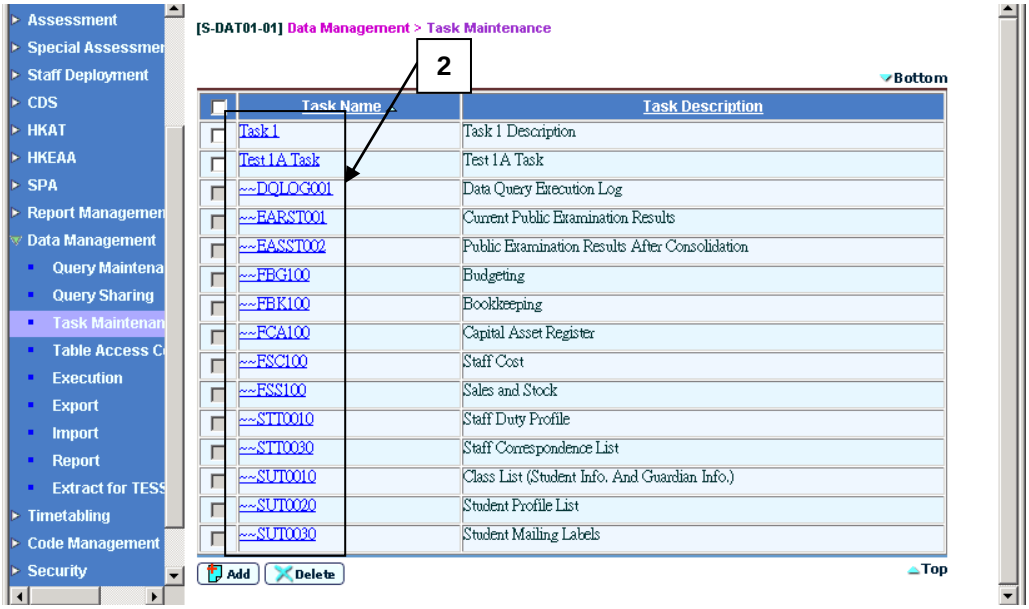
Users can modify the task information.

Pre-requisites

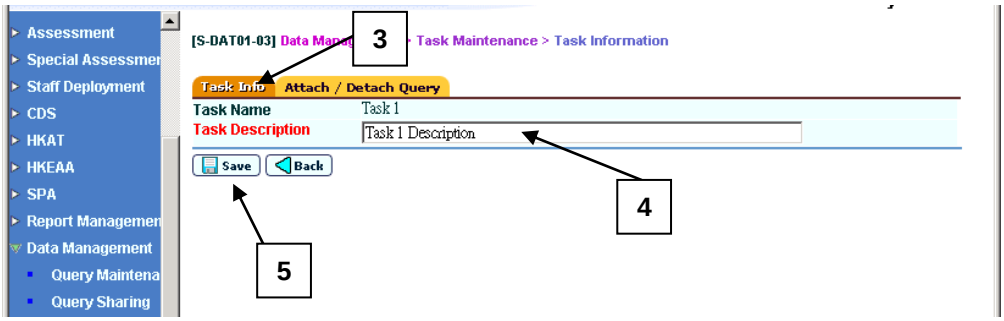
Users have to possess Task Maintenance Function access right.

User Procedures

1. Click **[Data Management]** → **[Task Maintenance]** on the left menu.



2. Click on the **Task Name** link to view the task information.
3. Click the **Task Info** tab.



4. Modify the **Task Description**.
5. Click the **[Save]** button to save the **Task Info** changes.
6. To change the attached queries, click the **Attach / Detach Query** tab.

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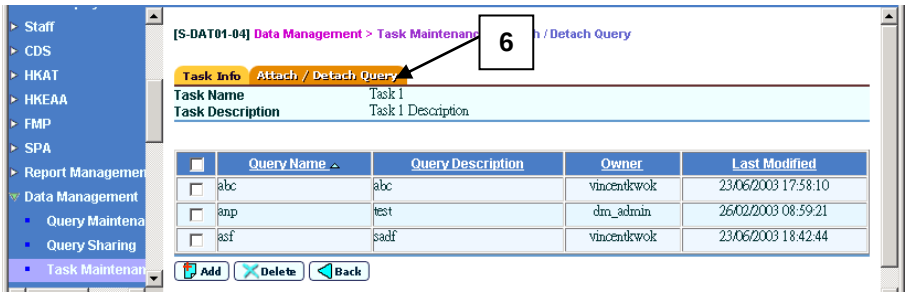

7. To attach other queries, click the **[Add]** button. Follow the same steps as in "Add Task" to attach new queries.
8. To detach queries, click the box beside the **Query Name** to be detached.
9. Click the **[Delete]** button.

📖 Post-effects

N/A

📖 Notes

When a query is detached from a task, the query itselfwill not be deleted.

Delete Task

📖 Function Description

Users can delete the tasks.

📖 Pre-requisites

1. Task should exist.
2. Users have to possess Task Maintenance Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Task Maintenance]** on the left menu.
2. Check the box beside the **Task Name** to be deleted.

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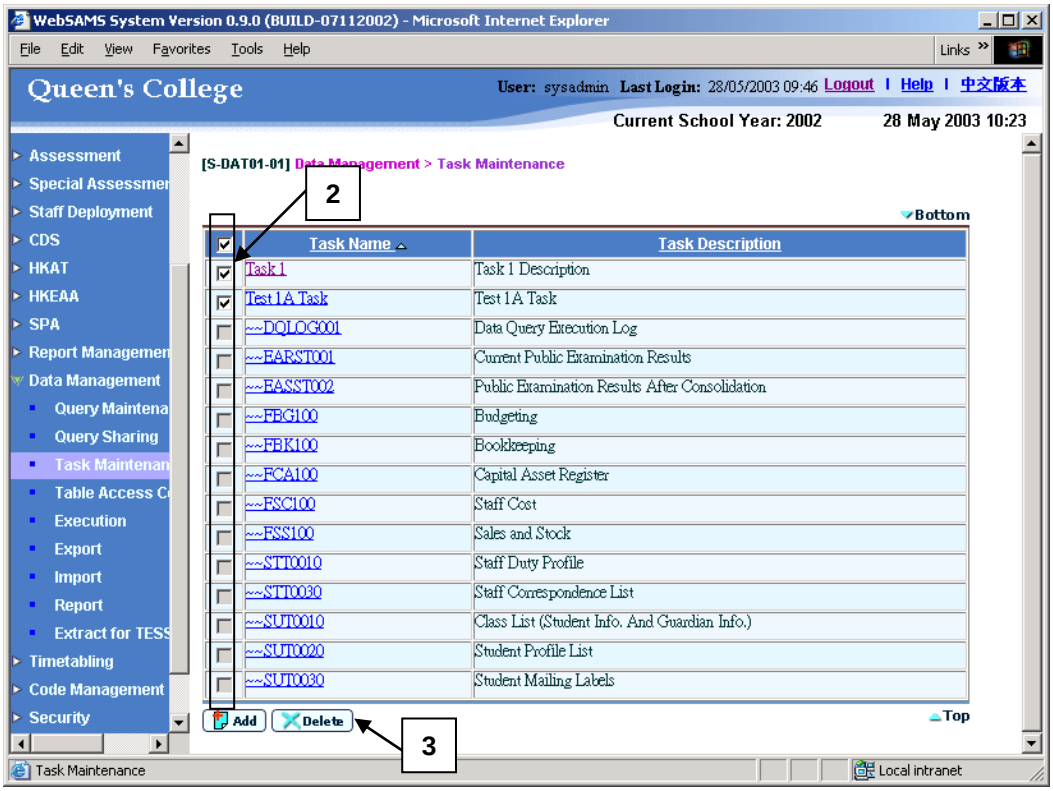

3. Click the **[Delete]** button.

📖 Post-effects

N/A

📖 Notes

1. When a task is deleted, the queries attached to the task will not be deleted.
2. Standard tasks cannot be deleted. The checkboxes of the standard tasks are disabled.

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2.5 Maintain Table Access

Function Description

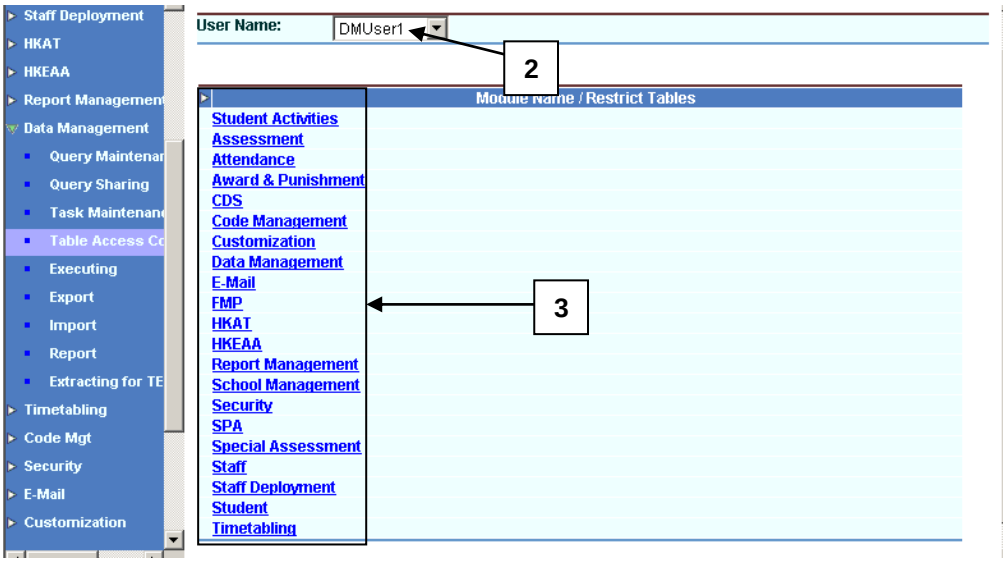
Users can restrict access to tables by users of DM_ADMIN and DM_USER user groups.

Pre-requisites

Users have to possess Table Access Control Function access right.

User Procedures

1. Click **[Data Management]** → **[Table Access Control]** on the left menu.
2. Select a **User Name**.



3. To set the restricted tables in a module, click on the link under the module name in the **Module Name / Restrict Tables** list.
4. A new window will pop up. A list of **Tables** belonging to the module will be shown. Check the boxes beside the name of the tables to be added to the restricted table list.

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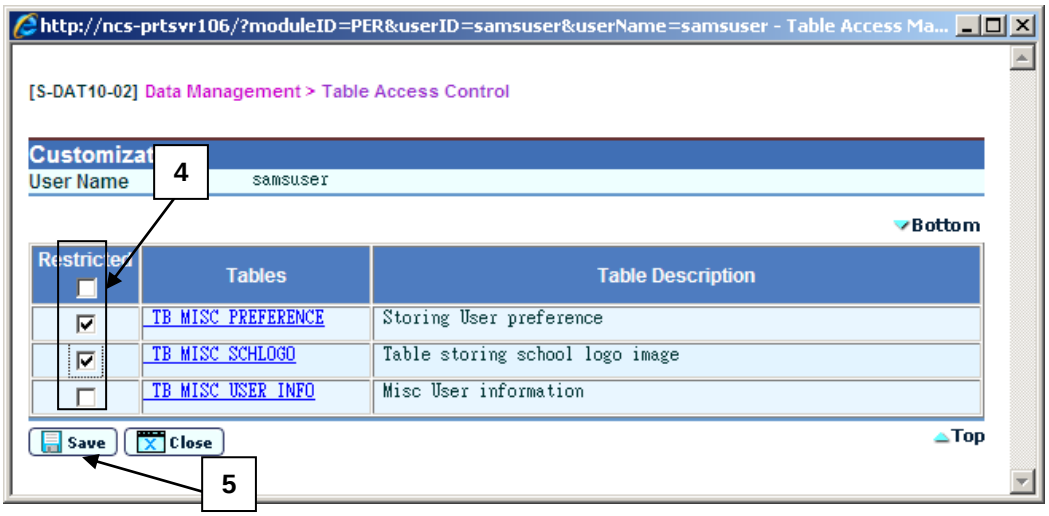
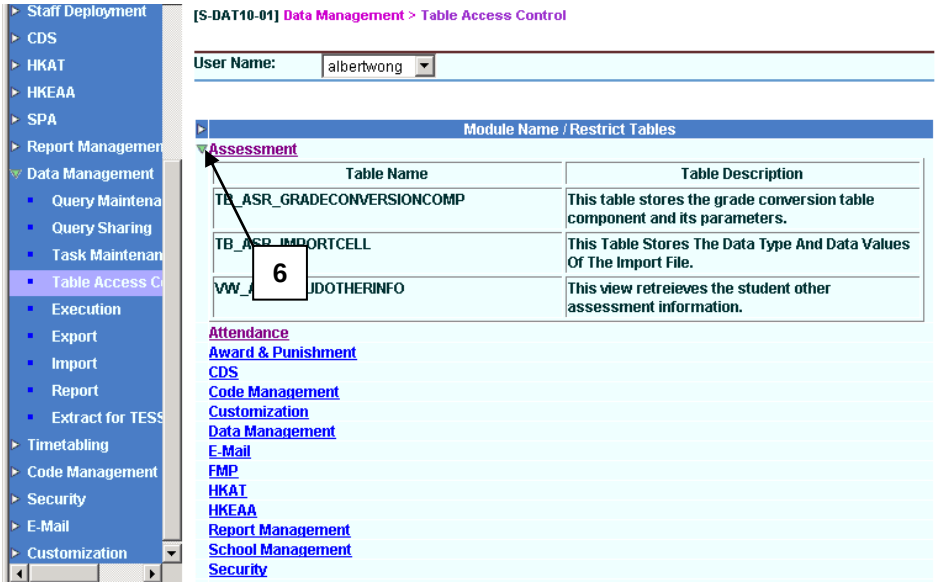


5. Click the **[Save]** button to return to the main window.
6. If there is a small triangle besides a module, click the small triangle to expand and show the user's restricted tables.
7. Click the small triangle again to collapse and hide the restricted tables.



📖 Post-effects

1. Users of the DM_USER (Data User) and DM_ADMIN (Data Admin) user groups cannot execute a query with the restricted tables in the query.
2. Data Admin cannot create a query with the restricted tables in the query.
3. Data Admin / users of the SYSTEM_ADMIN user group cannot share a query to other users who cannot access the tables in the query.

📖 Notes

The assignment of restricted tables will not affect other modules.

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2.6 Execute Query / Task

2.6.1 Execute Query

📖 Function Description

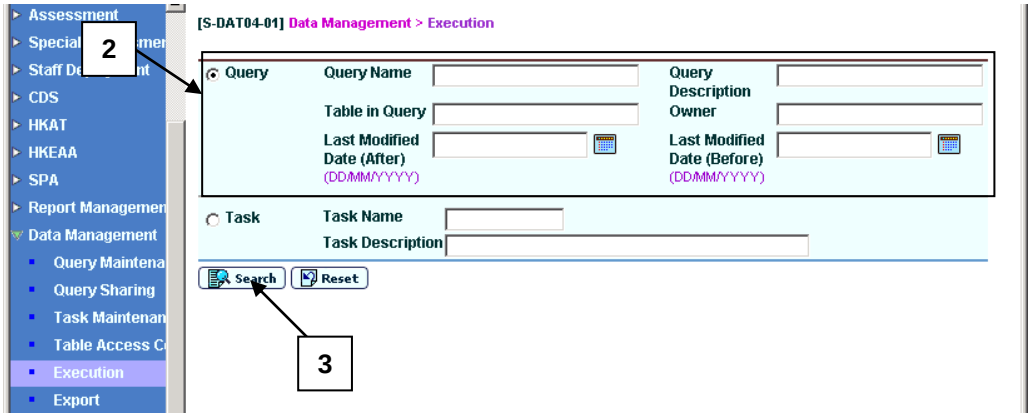
Users can execute queries. They can specify the output format of the data extracted from the system.

📖 Pre-requisites

1. Queries should be prepared.
2. Users have to possess Execution Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Execution]** on the left menu.
2. Select a **Query**. Fill in the search criteria.



3. Click the **[Search]** button to search for queries.

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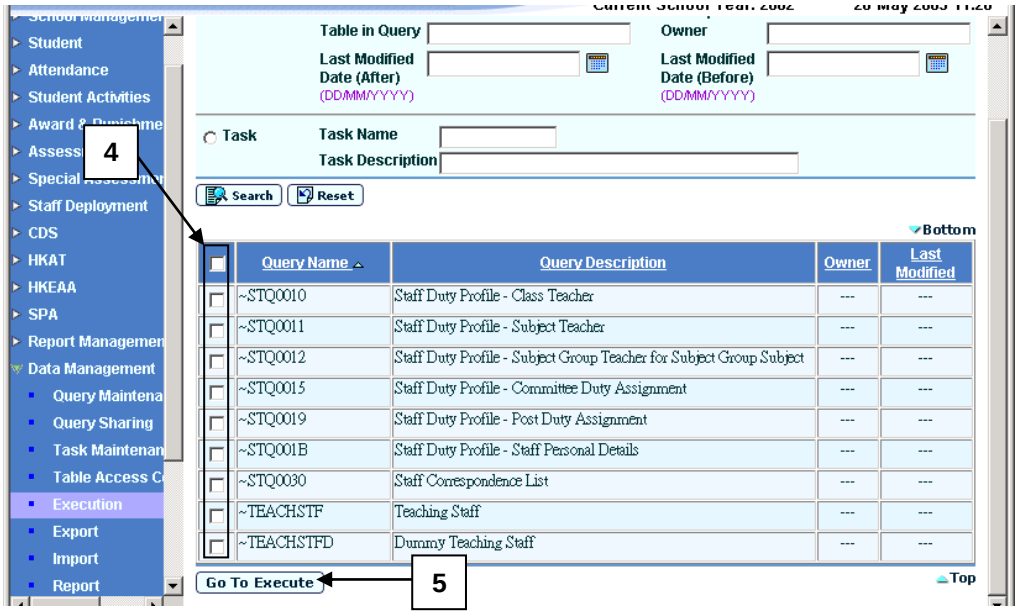
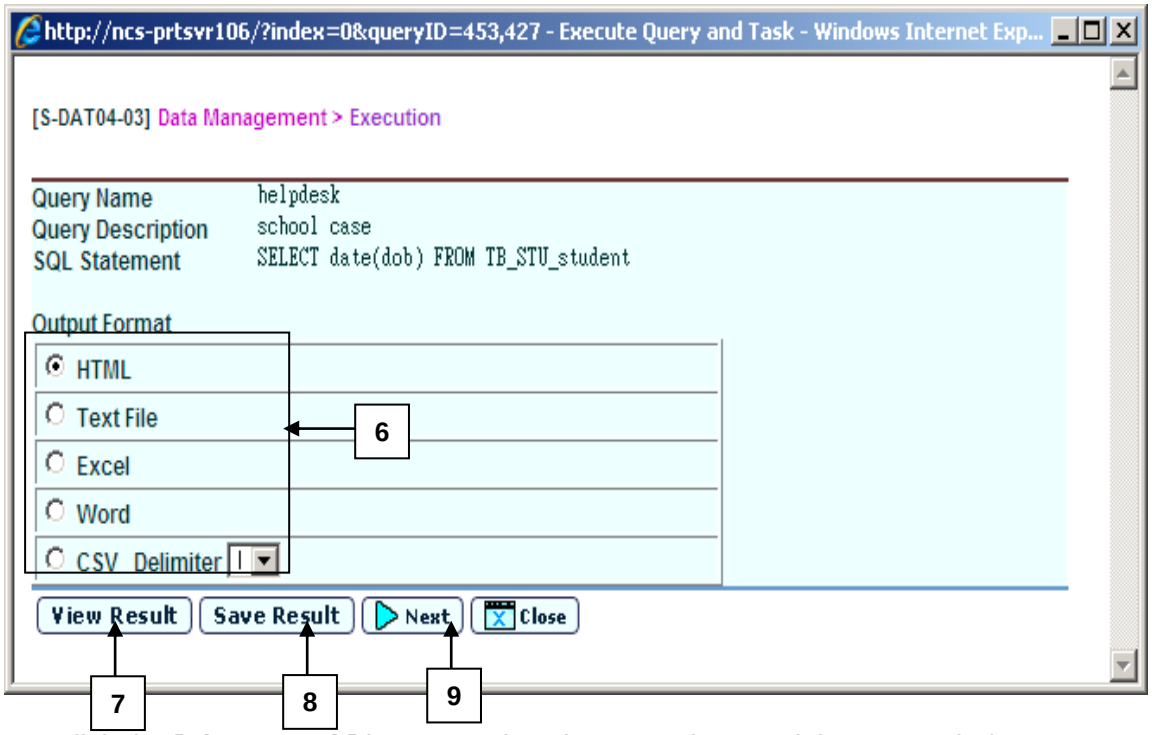


4. Check the boxes beside **Query Name** to be executed.
5. Click the **[Go To Execute]** button.
6. A new window will pop up to display the query information. Select the **Output Format**.



7. Click the **[View Result]** button to view the execution result in a new window.
8. Click the **[Save Result]** button to save the execution result to a local hard disk.
9. If users have selected more than one query, click the **[Next]** button to view the information of the next query and repeat Step 6 to Step 8.

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📖 Post-effects

After the query is executed, the data will be extracted in the format specified by the users. Audit trail will be updated with the following information:

i. The person who executes the query.
ii. Query Name
iii. SQL statement
iv. Date of execution

📖 Notes

1. Users can input Chinese character in the search criteria.
2. The system will perform a syntax check and prompt an error message if the query is invalid.
3. If users try to execute a query with restricted tables that they cannot access, errors will be prompt.
4. Only the following built-in user groups can execute queries with the STF module tables:
   i. SCHOOL_HEAD
   ii. STAFF_MANAGEMENT_1
   iii. STAFF_MANAGEMENT_2
   iv. STAFF_MANAGEMENT_3
5. Only the following built-in user groups can execute queries with the FMP module tables:
   i. SCHOOL_HEAD
   ii. FMP_ACCT_CLERK
   iii. FMP_PETTYCASH_CLERK
   iv. FMP_ADMIN
   v. FMP_USER1
   vi. FMP_USER2
   vii. FMP_USER3
6. For schools having two WebSAMS, FMP queries are available in the first WebSAMS only. For example, a school with two WebSAMS — Primary AM and PM, FMP queries are available in Primary AM WebSAMS, but not Primary PM WebSAMS. Users have to login the Primary AM WebSAMS to run FMP queries under Data Management.

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2.6.2 Execute Task

Function Description

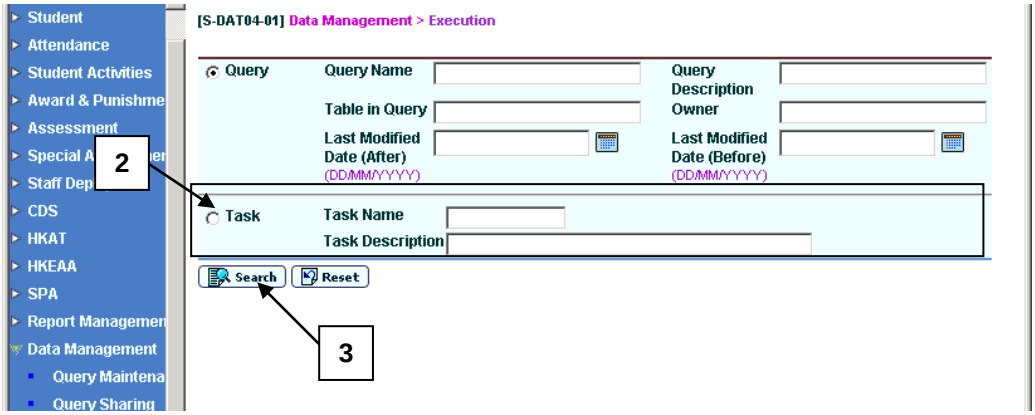
Users can execute tasks. They can specify the output format of the data extracted from the system.

Pre-requisites

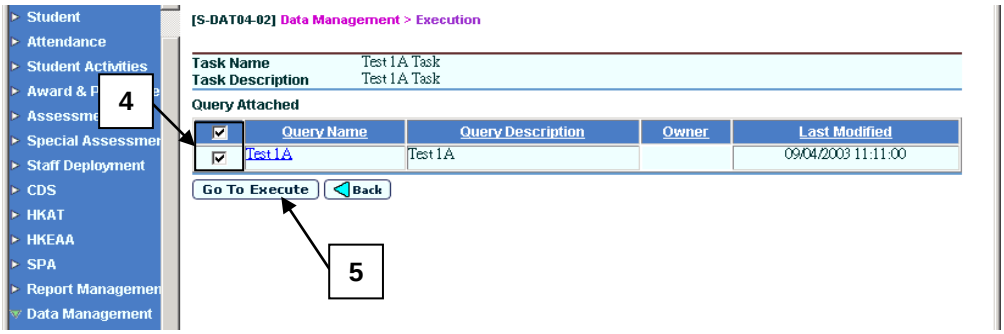
1. Tasks should be prepared.
2. Users have to possess Execution Function access right.

User Procedures

1. Click **[Data Management]** → **[Execution]** on the left menu.
2. Select a **Task**. Fill in the search criteria.



3. Click the **[Search]** button. Click on the **Task Name** link to view the queries attached.



4. Check the boxes beside **Query Name** to be executed (By default, all queries are checked).
5. Click the **[Go To Execute]** button.
6. A new window will pop up to display the query information. Select the **Output Format**.

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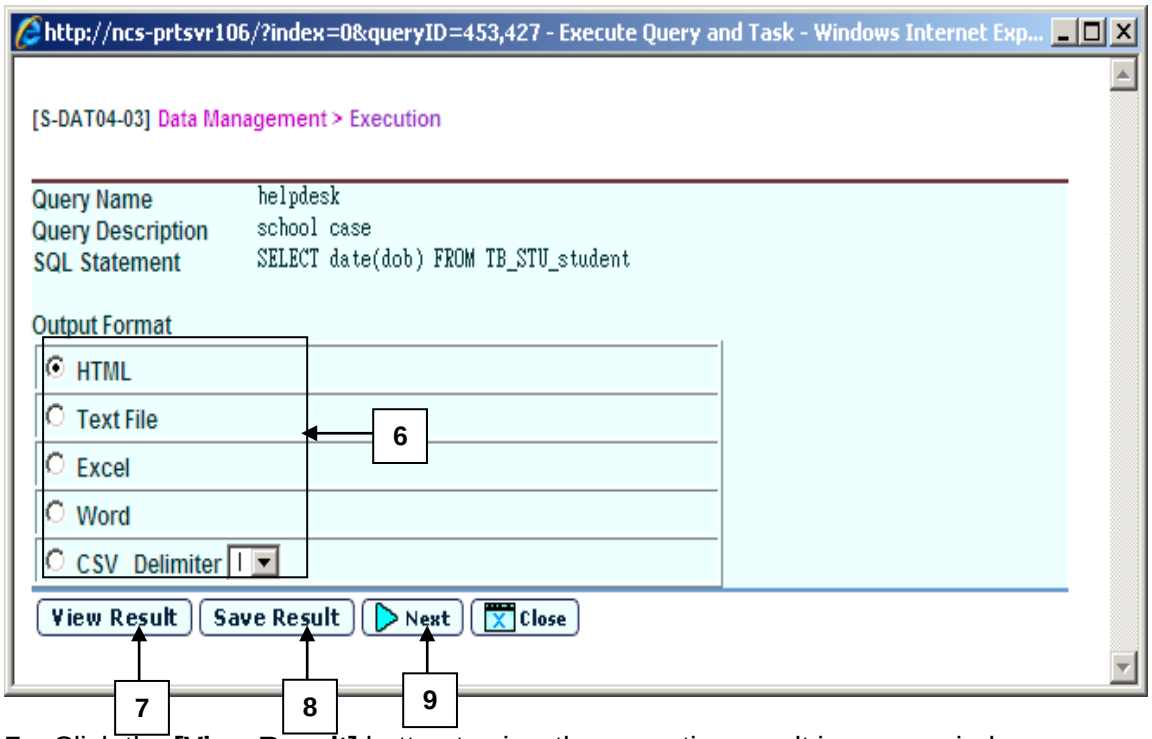

7. Click the **[View Result]** button to view the execution result in a new window.
8. Click the **[Save Result]** button to save the execution result to a local hard disk.
9. If users have selected more than one query, click the **[Next]** button to view the information of the next query and repeat Step 6 to Step 8.

📖 Post-effects

After the query is executed, the data will be extracted in the format specified by the users. Audit trail will be updated with the following information:

i. The person who executes the query.
ii. Query Name
iii. SQL statement
iv. Date of execution

📖 Notes

1. Users can input Chinese character in the search criteria.
2. The system will perform a syntax check and prompt an error message if the query is invalid.
3. If users try to execute a query with restricted tables that they cannot access, errors will be prompt.
4. Only the following built-in user groups can execute queries with the STF module tables:
   i. SCHOOL_HEAD
   ii. STAFF_MANAGEMENT_1
   iii. STAFF_MANAGEMENT_2
   iv. STAFF_MANAGEMENT_3

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5. Only the following built-in user groups can execute queries with the FMP module tables:
   i. SCHOOL_HEAD
   ii. FMP_ACCT_CLERK
   iii. FMP_PETTYCASH_CLERK
   iv. FMP_ADMIN
   v. FMP_USER1
   vi. FMP_USER2
   vii. FMP_USER3
6. For schools having two WebSAMS, FMP queries are available in the first WebSAMS only. For example, a school with two WebSAMS — Primary AM and PM, FMP queries are available in Primary AM WebSAMS, but not Primary PM WebSAMS. Users have to login the Primary AM WebSAMS to run FMP queries under Data Management.

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2.7 Export Query / Task

2.7.1 Export Query

📖 Function Description

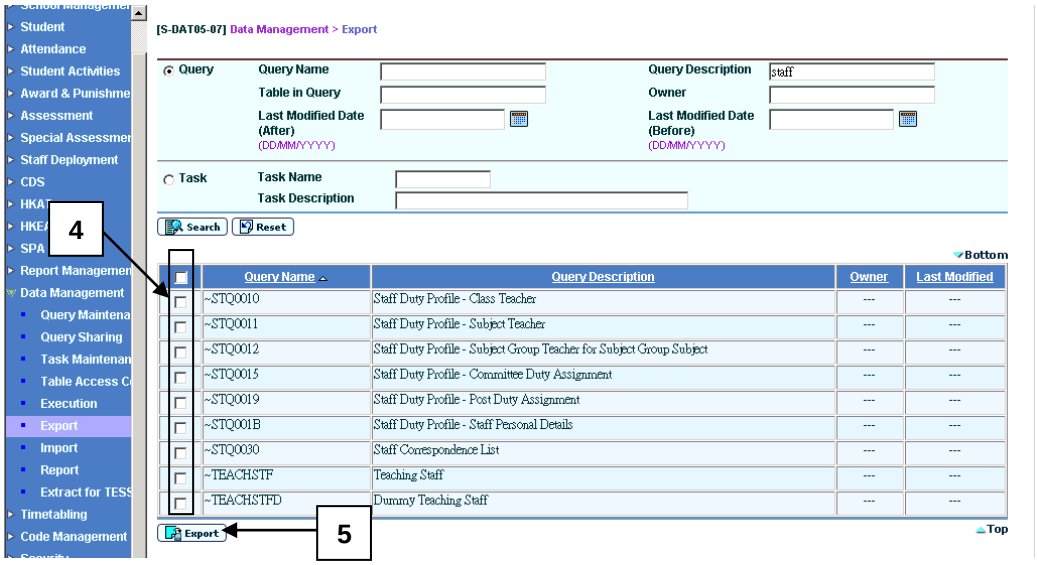
Users can use this function to export the query statements in WebSAMS to an external file. Afterwards, they can modify the query statements or import the queries to another school.

📖 Pre-requisites

1. Queries should be prepared.
2. Users have to possess Execution Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Export]** on the left menu.
2. Select a **Query**. Fill in the search criteria.
3. Click the **[Search]** button to search for a particular query.



4. Check the boxes beside **Query Name** to be exported.
5. Click the **[Export]** button.

📖 Post-effects

The extracted queries can be used outside WebSAMS.

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📖 Notes

1. Users can input Chinese character in the search criteria.
2. When exporting, there will be a default filename.
3. All queries will be exported as Advance Query.
4. Only the SQL statement of the data query will be extracted but not the query data.
5. The exported queries will be in XML format (Appendix I).

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2.7.2 Export Task

📖 Function Description

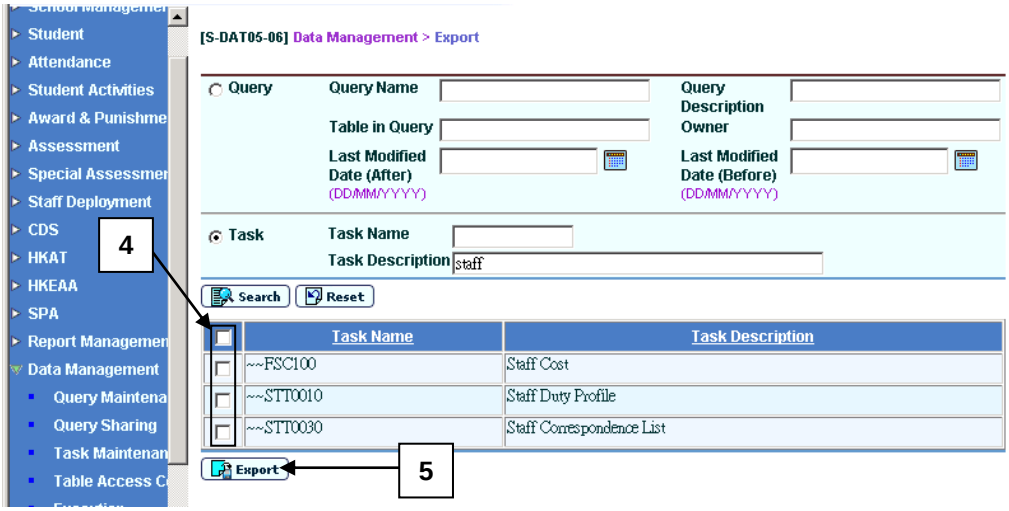
Users can export tasks.

📖 Pre-requisites

Users have to possess Export Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Export]** on the left menu.
2. Select a **Task**. Fill in the search criteria.
3. Click the **[Search]** button to search for a particular task.



4. Check the boxes beside the **Task Name** to be exported.
5. Click the **[Export]** button.

📖 Post-effects

The extracted queries / tasks can be used outside WebSAMS.

📖 Notes

1. Users can input Chinese character in the search criteria.
2. When exporting, there will be a default filename.
3. If users select more than one task to export, all the queries attached to the tasks will be exported. However, the task information (task name and task description) will not be exported.

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2.8 Import

2.8.1 Import Task and Import Query

📖 Function Description

For Import Task:

This function provides a mean to import tasks from files.

For Import Query:

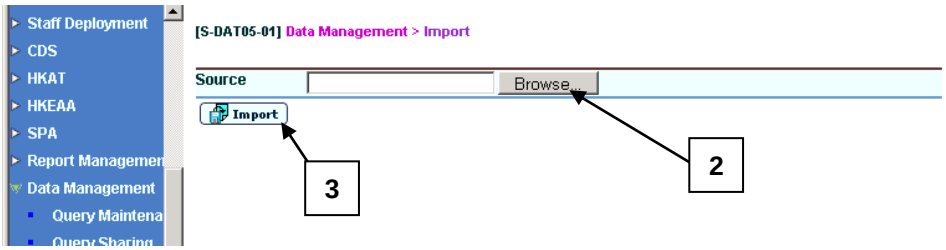
This function provides a mean to import queries from files. Therefore, users can create / modify query statements in other environments that allow editing of the Structural Query Language (SQL).

📖 Pre-requisites

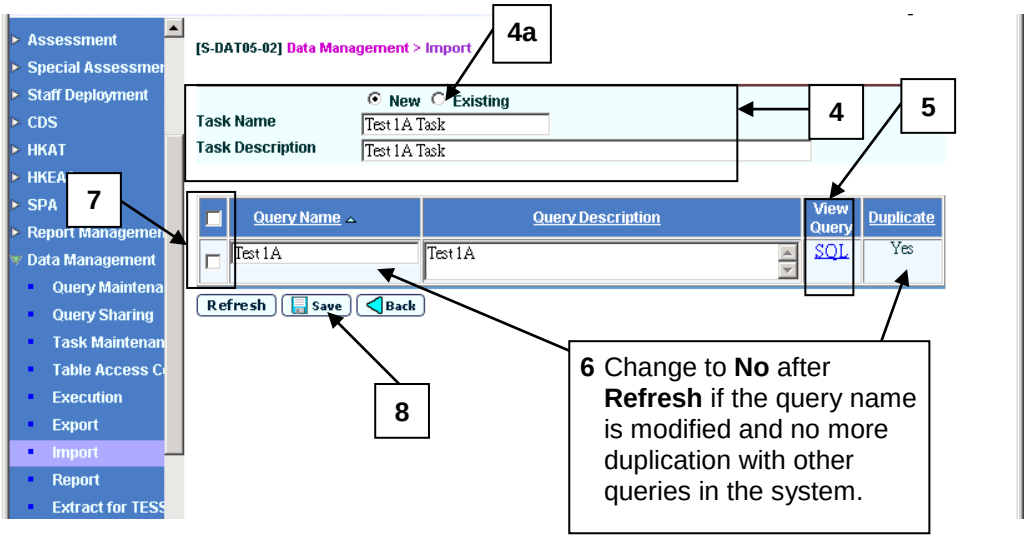
1. Queries / Tasks must be prepared in XML format (Appendix I).
2. Users have to possess Import Function access right.

User Procedures

1. Click **[Data Management]** → **[Import]** on the left menu.



1. Click the **[Browse]** button in this window to find the file.
2. After the file has been selected, the text box will be filled in. Click the **[Import]** button.



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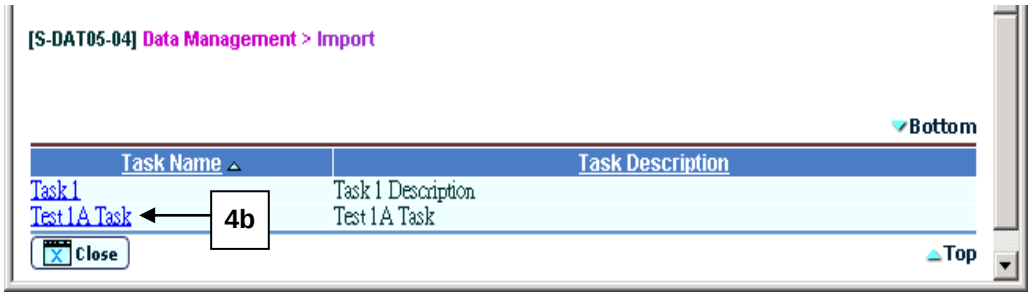

3. Enter a **Task Name** and **Task Description**.
   a. Users can also click on the **Existing** radio box. A new window will pop up.
   b. Users can then click on one of the task name, and the system will automatically fill in the **Task Name** and **Task Description** fields in the original window.
4. Users can click on the **View Query** link to view the query information in a new window.
5. Users can edit the name of the query and click the **[Refresh]** button. The **Duplicate** column will be updated to **No**.
6. Check the boxes beside **Query Name** to be imported.
7. Click the **[Save]** button.

📖 Post-effects

The imported queries / tasks can be used in WebSAMS.

📖 Notes

1. If the imported query's name duplicates with an existing query in the system, the system will display an error.
2. If the imported task's name duplicates with an existing task in the system, the system will append the queries attached to the imported task after the existing queries of that task.
3. If the users import a query with table that they do not have the right to access, an error message will be prompted.
4. The import query's name cannot start with "~".
5. The import task's name cannot start with "~~".
6. All queries will be imported as Advance Query (For Import Task only).

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2.9 Report

2.9.1 Entity Relationship Diagram

📖 Function Description

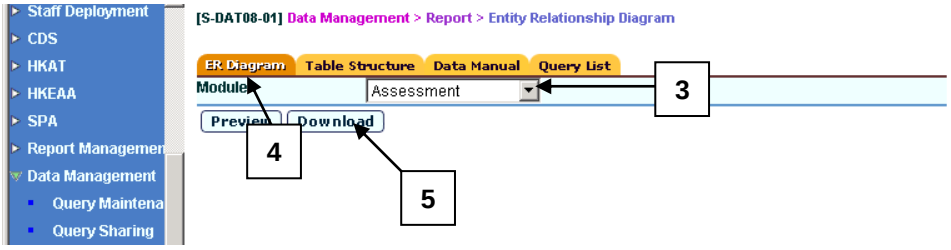
Users can view the entity relationship diagram of the WebSAMS database.

📖 Pre-requisites

Users have to possess Report – Entity Relationship Diagram Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Report]** on the left menu.
2. By default, the **Table Structure** tab is displayed.
3. Click the **ER Diagram** tab



4. Select the **Module**.
5. Click the **[Preview]** button to view the entity relationship diagram in a new window.
6. Click the **[Download]** button to save the file.

📖 Post-effects

N/A

📖 Notes

N/A

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2.9.2 Table structure

📖 Function Description

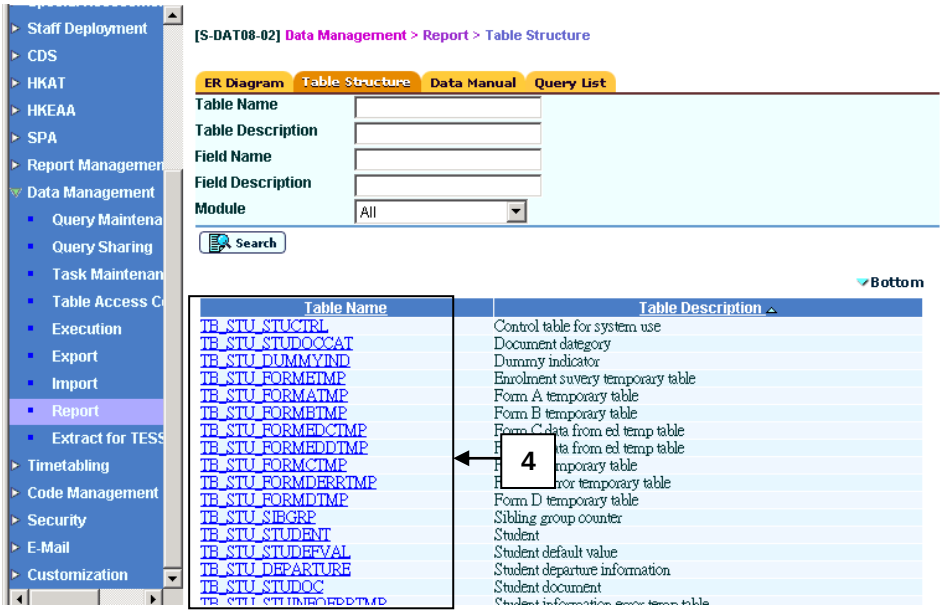
Users can view the database table structure.

📖 Pre-requisites

Users have to possess Report – Table Structure Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Report]** on the left menu.
2. Click the **Table Structure** tab. Fill in the search criteria.
3. Click the **[Search]** button to search for a particular table.



4. Click on the **Table Name** link to view the database table structure in a new window.

📖 Post-effects

N/A

📖 Notes

N/A

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2.9.3 Data Manual

📖 Function Description

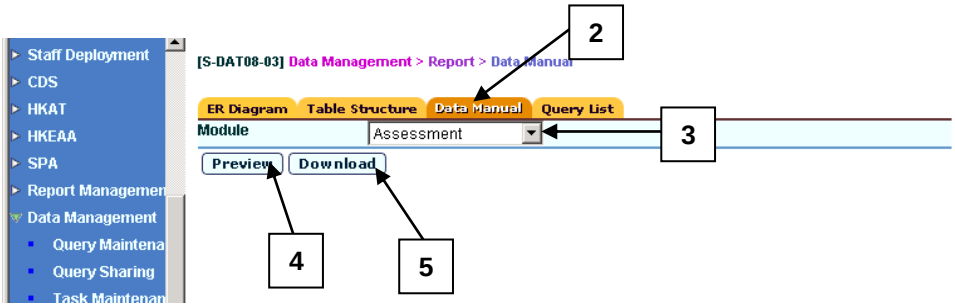
Users can view the data manual.

📖 Pre-requisites

Users have to possess Report – Data Manual Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Report]** on the left menu.
2. Click the **Data Manual** tab.



3. Select the **Module**.
4. Click the **[Preview]** button to view the softcopy of the data manual in a new window.
5. Click the **[Download]** button to save the file.

📖 Post-effects

N/A

📖 Notes

N/A

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2.9.4 Query List

Query

Function Description

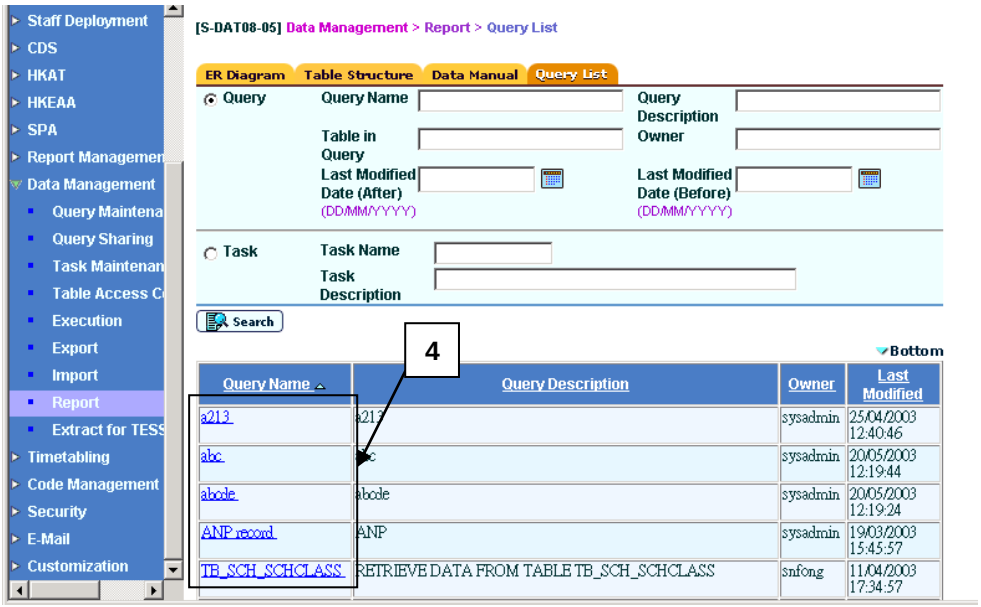
Users can view the SQL statements.

Pre-requisites

Users have to possess Report – Query List Function access right.

User Procedures

1. Click **[Data Management]** → **[Report]** on the left menu.
2. Select a **Query list**. Select a **Query**. Fill in the search criteria.
3. Click the **[Search]** button to search for a particular query.



4. Click on the **Query Name** link to view the SQL statements.

Post-effects

N/A

Notes

N/A

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Task

Function Description

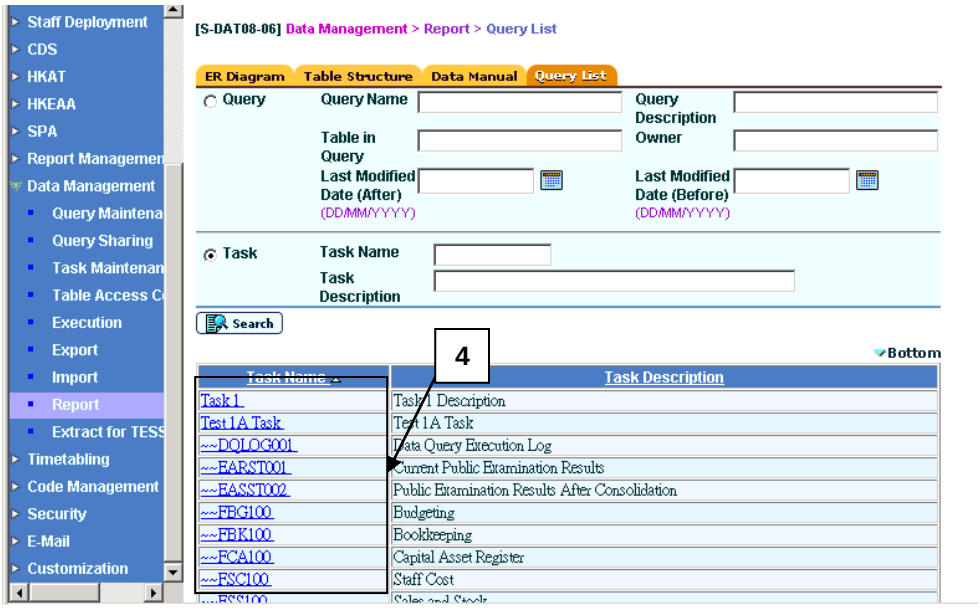
Users can view the SQL statements.

Pre-requisites

Users have to possess Report Function – Query List access right.

User Procedures

1. Click **[Data Management]** → **[Report]** on the left menu.
2. Select a **Query list**. Select a **Task**. Fill in the search criteria.
3. Click the **[Search]** button to search for a particular task.



4. Click on the **Task Name** link to view the SQL statements of all the queries attached to the selected task.

Post-effects

N/A

Notes

N/A

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2.10 Extract for TESS

Extract

Function Description

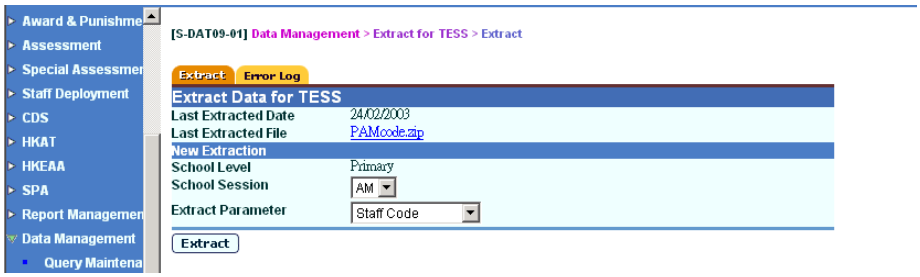
This function allows users to extract timetabling information for the existing timetabling system (TESS).

Pre-requisites

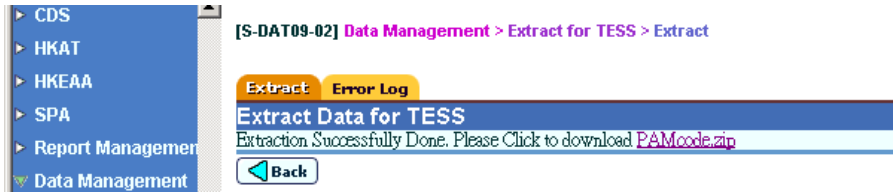
1. The system has completed “Plan New School Year” as described in Inter-Year Processing.
2. Users have to possess Extract for TESS Function access right.

User Procedures

1. Click **[Data Management]** → **[Extract for TESS]** on the left menu.
2. Select the **School Level**, **School Session** and **Extract Parameter**.
3. Click on the **[Extract]** button to extract the timetabling information.



4. If the extraction is successful, successful message together with the extracted ZIP file will be shown.



5. Click the link of the ZIP file to download it for TESS.

Post-effects

After downloading the file, users can import it into the stand-alone timetabling system (TESS).

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Notes

1. The system will always extract information of the new school year.
2. The last extraction date of the timetabling extraction file is displayed together with a hyperlink to download the last extracted file. The users can download the last extracted file or re-extract the timetabling information.
3. If there is no error during extraction, the timetabling information will be saved in a ZIP file consisting of two files as follows:
   - ~~s_to_t.txt
   - staffcd.dat
4. If there is an error during extraction, users will be instructed to go to the "Error Log" page to view the error details.
5. The extracted files will overwrite the previous copy in the server.

Error Log

Function Description

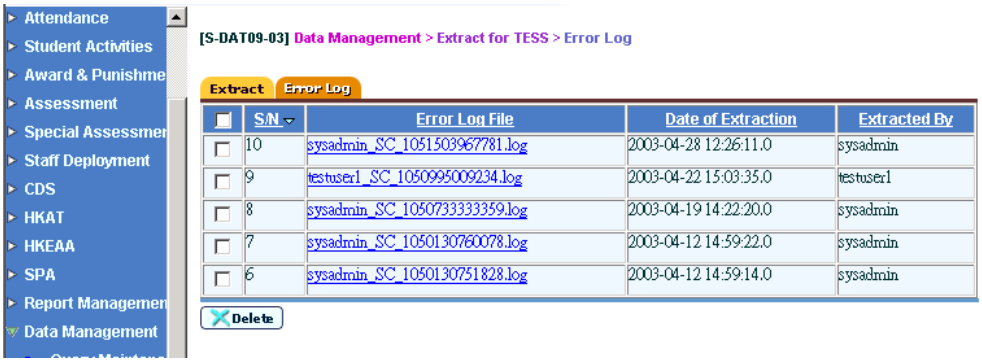
This function will display all the errors that occur during the extraction for TESS.

Pre-requisites

1. Errors occur when extracting files for TESS.
2. Users have to possess Extract for TESS – Error Log Function access right.

User Procedures

1. Click **[Data Management]** → **[Extract for TESS]** on the left menu.
2. Click on the **Error Log** tab page.
3. The errors occur during the extraction will be shown.
4. Click on the hyperlink of the Error Log File to view the details of the error.
5. To remove the error log files, check the boxes beside the **S/N** column and click the **[Delete]** button.



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📖 Post-effects

N/A

📖 Notes

The error log file contains the extraction parameters and every error encountered during the extraction, e.g. no teacher assigned to class.

2.11 Extract for SOP

📖 Function Description

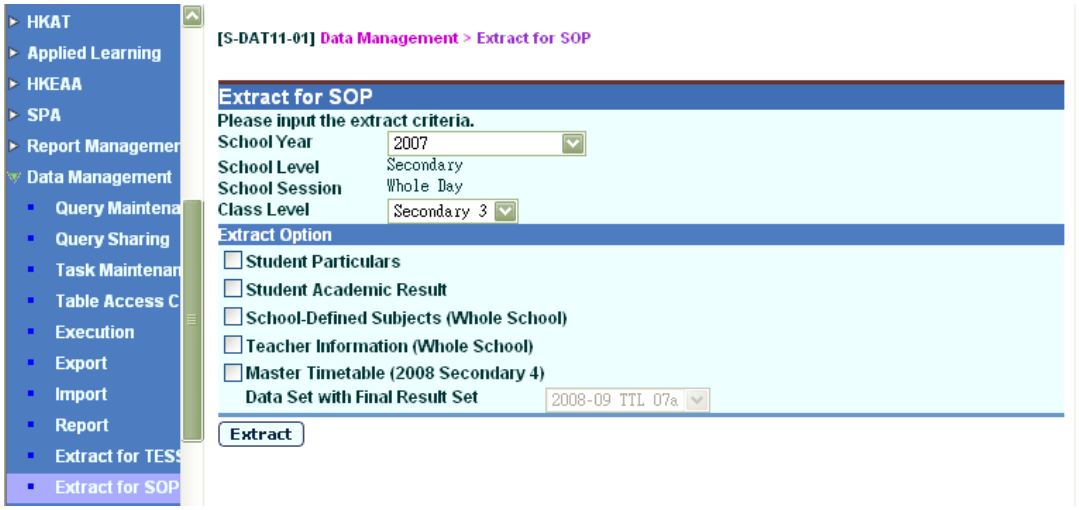
This function allow user to extract data from WebSAMS into a zip file that contains Excel files for Student Option Programme (SOP) to import. The data includes the student particulars, student academic result, school-defined subjects (whole school), teacher information (whole school) and master timetable.

📖 Pre-requisites

1. This function should be for secondary school only.
2. Users have to possess Extract for SOP Function access right.

🖱 User Procedures

1. Click **[Data Management]** → **[Extract for SOP]** on the left menu.
2. Select the **School Year**, **School Level**, **School Session** and **Class Level**.
3. Select the **Extract Option**.
4. Click on the [**Extract**] button to extract the data selected in Extract Option.



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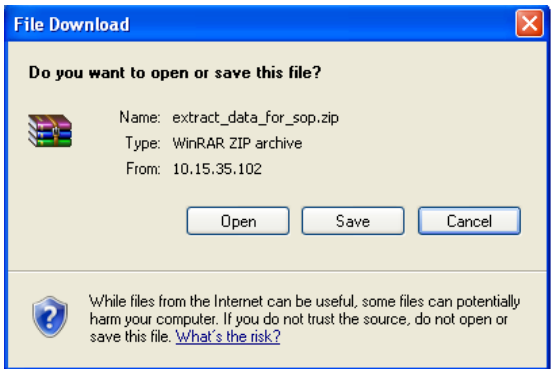
5. If the extraction is successful, The zip file (extract_data_for_sop.zip) will be popped for user to save or open.


File Download
Do you want to open or save this file?
Name: extract_data_for_sop.zip
Type: WinRAR ZIP archive
From: 10.15.35.102
Open
Save
Cancel
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?

📖 Post-effects

After downloading the file, users can import it in Student Option Programme (SOP).

📖 Notes

In the zip file (extract_data_for_sop.zip), it contains the different data files (depends on user selection in **Extract Option**) in Excel format.

Here are five options for data extraction in the following:

For the Student Particulars,

1. All active student particulars will be selected by school year, school level, school session and class level entered by users.
2. The repeaters will be deleted or created manually in SOP.
3. The class name of the selected students in the next school year if available.
4. The rank is in class level.
5. The name of the data file is **DataSetStudentParticulars.xls**.

For the Student Academic Result,

1. All active Student Academic Result will be selected by school year, school level, school session, and class level.
2. All assessments and terms include annual result will be retrieved for the specified students.
3. Two data files will be generated and called **DataSetAcademicResult.xls** for the academic result and **DataSetAcademicResultSubject.xls** for the subject involved.

For the School-Defined Subjects,

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1. Retrieve all active school-defined subjects.
2. The name of the data file is **DataSetSchoolDefinedSubject.xls**.

For the Teacher Information,

1. Retrieve all active teachers who have teaching duty.
2. The name of the data file is **DataSetTeacher.xls**.

For the Master Timetable,

1. Retrieve the final result set of the selected data set.
2. SOP subject group code, SOP subject code (i.e. Combined Science Code) and SOP time block will be retrieved for the time slot, if user has been imported the Group for Cross-Class Subject for the corresponding class levels.
3. The timetabling of next school year and next class level will be retrieved of the searching criteria. The label will be updated when searching criteria are changed. E.g. If user input School Year is 2008 and Class Level is Secondary 3, the timetable of 2009 Secondary 4 will be extracted.
4. The name of the data file is **DataSetMasterTimetable.xls**.

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3 Appendix

3.1 Appendix I: Import / Export XML File Format

```
<?xml version="1.0" encoding="UTF-8" ?>
<task>
 <task-name>...</task-name>
 <task-desc>...</task-desc>
 <queries>
  <query>
   <query-name>...</query-name>
   <query-desc>...</query-desc>
   <sql-code>...</sql-code>
   <distinct>N</distinct>
   <modify-date>...</modify-date>
    </query>
  </queries>
</task>
```

Note:

(1) The <task>, <task-name> and <task-desc> XML tags are not required if only queries are imported.

(2) The <distinct> XML tag 'N' can either be '0' or '1', where '1' means distinct records.

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3.2 Appendix II: Parameter List

Query Name	No.	Parameter Description	Parameter Name	Example	Remark
~AREA	-	-	-	-	-
~BIRCTY	-	-	-	-	-
~DQEXLOG	-	-	-	-	-
~EACMPRSLT	1	Exam Year	TB_HKE_ENTRYCOMPONENT.EXAMYEAR	2003	YYYY
	2	Exam Code	TB_HKE_ENTRYCOMPONENT.EXAMCODE	A	HK(A)LE
~EASBJRSLT	1	Exam Year	TB_HKE_ENTRY.EXAMYEAR	2003	YYYY
	2	Exam Code	TB_HKE_ENTRY.EXAMCODE	A	HK(A)LE
~EXMRSLCON	1	Exam Year	A.EXAMYEAR	2003	YYYY
	2	Exam Code	A.EXAMCODE	A	HK(A)LE
	3	School Unique ID	A.SUID	9996	4-digit(s) number
~FBG101	1	Accounting Year	ACCT_YEAR_YYYY	2002	for accounting year 2002/2003
	2	School Level	SCHLEVEL	2	for Primary (please refer to Code Management module)
	3	School Session	SCHSESSION	1	for AM (please refer to Code Management module)
~FBG102	1	Accounting Year	ACCT_YEAR_YYYY	2002	for accounting year 2002/2003
	2	School Level	SCHLEVEL	2	for Primary (please refer to Code Management module)
	3	School Session	SCHSESSION	1	for AM (please refer to Code Management module)
~FBG103	1	Accounting Year	ACCT_YEAR_YYYY	2002	for accounting year 2002/2003
	2	School Level	SCHLEVEL	2	for Primary (please refer to Code Management module)
	3	School Session	SCHSESSION	1	for AM (please refer to Code Management module)
~FBG104	1	Accounting Year	ACCT_YEAR_YYYY	2002	for accounting year 2002/2003
	2	School Level	SCHLEVEL	2	for Primary (please refer to Code Management module)
	3	School Session	SCHSESSION	1	for AM (please refer to Code Management

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Query Name	No.	Parameter Description	Parameter Name	Example	Remark
					module)
~FBK101	1	Accounting Month	ACCTMTH_YYYYMM	200303	YYYYMM
~FBK102	1	Accounting Year	ACCT_YEAR_YYYY	2002	for accounting year 2002/2003
~FBK103	1	Accounting Year	ACCT_YEAR_YYYY	2002	for accounting year 2002/2003
~FCA101	1	Registration Date (From)	REG_DATE_FROM_YYYYMMDD	20030301	YYYYMMDD
	2	Registration Date (To)	REG_DATE_TO_YYYYMMDD	20030301	YYYYMMDD
	3	Write-off Date (From)	WRITE_OFF_DATE_FROM_YYYYMMDD	20030301	YYYYMMDD
	4	Write-off Date (To)	WRITE_OFF_DATE_TO_YYYYMMDD	20030301	YYYYMMDD
~FCA102	-				
~FSC101	1	Payroll Month (From)	PAYROLL_MONTH_FROM_YYYYMM	200303	YYYYMM
	2	Payroll Month (To)	PAYROLL_MONTH_TO_YYYYMM	200303	YYYYMM
~FSS101	1	Purchase Voucher Date (From)	PURCHASE_DATE_FROM_YYYYMMDD	20030301	YYYYMMDD
	2	Purchase Voucher Date (To)	PURCHASE_DATE_TO_YYYYMMDD	20030301	YYYYMMDD
	3	Sales Voucher Date (From)	SALES_DATE_FROM_YYYYMMDD	20030301	YYYYMMDD
	4	Sales Voucher Date (To)	SALES_DATE_TO_YYYYMMDD	20030301	YYYYMMDD
	5	Write-off Date (From)	WRITEOFF_DATE_FROM_YYYYMMDD	20030301	YYYYMMDD
	6	Write-off Date (To)	WRITEOFF_DATE_TO_YYYYMMDD	20030301	YYYYMMDD
~FSS102	-				
~NATION	-	-	-	-	-
~RELIG	-	-	-	-	-
~SBJCMP	-	-	-	-	-
~SCHHUS	-	-	-	-	-
~STQ0010	-	-	-	-	-
~STQ0011	-	-	-	-	-
~STQ0012	-	-	-	-	-
~STQ0015	-	-	-	-	-
~STQ0019	-	-	-	-	-
~STQ001B	-	-	-	-	-
~STQ0030	-	-	-	-	-
~STREAM	-	-	-	-	-

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Query Name	No.	Parameter Description	Parameter Name	Example	Remark
~SUQ0010	1	School Year	A.SCHYEAR	2003	for school year 2003
	2	School Level	A.SCHLVL	2	for Primary (please refer to Code Management module)
	3	School Session	A.SCHSESS	1	for AM (please refer to Code Management module)
	4	Class Level	A.CLASSLVL	P1	for Primary 1 (please refer to Code Management module)
	5	Class Name	B.CLASSNAME	1A	for Class 1A (please refer to basic information of class details)
~SUQ0011	1	School Year	VW_STU_LATESTSTUDENT.SCHYEAR	2003	for school year 2003
	2	School Level	VW_STU_LATESTSTUDENT.SCHLVL	2	for Primary (please refer to Code Management module)
	3	School Session	VW_STU_LATESTSTUDENT.SCHSESS	1	for AM (please refer to Code Management module)
	4	Class Level	VW_STU_LATESTSTUDENT.CLASSLVL	P1	for Primary 1 (please refer to Code Management module)
	5	Class Name	TB_SCH_SCHCLASS.CLASSNAME	1A	for Class 1A (please refer to basic information of class details)
~SUQ0012	1	School Level	A.SCHLVL	2	for Primary (please refer to Code Management module)
	2	School Session	A.SCHSESS	1	for AM (please refer to Code Management module)
	3	Class Level	A.CLASSLVL	P1	for Primary 1 (please refer to Code Management module)
	4	Class Name	D.CLASSNAME	1A	for Class 1A (please refer to basic information of class details)
~SUQ0030	1	School Year	VW_STU_LATESTSTUDENT.SCHYEAR	2003	for school year 2003
~SUQ0031	1	School Year	VW_STU_LATESTSTUDENT.SCHYEAR	2003	for school year 2003
	2	School Level	VW_STU_LATESTSTUDENT.SCHLVL	2	for Primary (please refer to Code Management module)
	3	School Session	VW_STU_LATESTSTUDENT.SCHSESS	1	for AM (please refer to Code Management module)
	4	Class Level	VW_STU_LATESTSTUDENT.CLASSLVL	P1	for Primary 1 (please refer to Code Management module)

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Query Name	No.	Parameter Description	Parameter Name	Example	Remark
	5	Class Name	TB_SCH_SCHCLASS.CLASSNAME	1A	for Class 1A (please refer to basic information of class details)
~TEACHSTF	-	-	-	-	-
~TEACHSTFD	-	-	-	-	-
~TVLDOC	-	-	-	-	-

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